

# Index to Authors

## Vol. 87—1971

In abstracts of patents only the names of firms have been given and the abstracts have been indexed under these names. Where two firms have jointly taken out a patent, or where a paper has two or more authors, all the names have been included in the index. Names beginning with de, la, le, van, von, etc., are indexed under the surname.

### Abbreviations of Names of Firms, etc.

AAP .. ..	American Aniline Products Inc. (formerly Koppers Inc.)	Gy .. ..	Geigy, J. R., A.G. The Geigy Co. Ltd
AATCC .. ..	American Association of Textile Chemists and Colorists	HH .. ..	Hardman & Holden Ltd
Acna .. ..	Aziende Colori Nazionali Affini	HSH .. ..	Harshaw Chemical Co.
ACY .. ..	American Cyanamid Co.	HWL .. ..	Hickson & Welch Ltd
BA .. ..	Bates Chemical Co. Inc.	IC .. ..	Interchemical Corp
BASF .. ..	Badische Anilin- & Soda-Fabrik A.G.	ICI .. ..	Imperial Chemical Industries Ltd
CFM .. ..	Cassella Farbwerke Mainkur A.G.	KVK .. ..	Kemisk Værek Koge A/S
CGY .. ..	CIBA-Geigy Ltd	KYK .. ..	Nippon Kayaku Co.
CIBA .. ..	CIBA Ltd	LT .. ..	Laporte Titanium Ltd
Col .. ..	Cities Services Co. (formerly Columbian Carbon Co.)	MCI .. ..	Mitsubishi Chemical Industries Ltd
CSIRO .. ..	Commonwealth Scientific and Industrial Research Organisation	MDW .. ..	Mitsui Chemical Industry Co. Ltd
DH .. ..	Durand & Huguenin S.A.	MMM .. ..	Minnesota Mining & Manufacturing Corp
DUP .. ..	E.I. du Pont de Nemours & Co. Inc.	Montecatini ..	Montecatini Società Generale per l'Industria Mineraria e Chimica
FBy .. ..	Farbenfabriken Bayer A.G.	NL .. ..	National Lead Co.
FC .. ..	Ferro Corp	NSK .. ..	Sumitomo Chemical Co. Ltd
FH .. ..	Farbwerke Hoechst A.G.	MAY .. ..	Otto B May Inc.
Fran .. ..	Compagnie Française des Matières Colorantes S.A.	Rhône Poulenc	Société des Usines Chimiques Rhône-Poulenc
FW .. ..	VEB Chemiekombinat Bitterfeld (formerly Farbenfabrik Wolfen)	S .. ..	Sandoz A.G. Sandoz Products Ltd
GAF .. ..	GAF Corp	Vond .. ..	N.V. Fabriek van Chemische Producten Vondelingenplaat
GS .. ..	G. Siegle & Co. G.m.b.H.	YDC .. ..	Yorkshire Chemicals Ltd (formerly Yorkshire Dyeware & Chemical Co.)

### Symbols used in Index

The following symbols have been added, where appropriate, after the names of authors.

AC .. ..	Publication sponsored by the Automation Committee	FTCC .. ..	Publication sponsored by the Fastness Tests Co-ordinating Committee
BDC .. ..	Publication sponsored by the Basic Dyes on Acrylic Fibres Committee	N .. ..	Note
C .. ..	Communication	O .. ..	Obituary Notice
CMC .. ..	Publication sponsored by the Colour Measurement Committee	P .. ..	Proceedings
Corr .. ..	Correspondence	PC .. ..	Pattern Card
EP .. ..	Explanatory Paper	R .. ..	Book Review
		RP .. ..	Review Paper

### A

Aaron R 204	Alcan Research & Development 254
Abakumova R A 286	Aleksandrova E M 286
Abdelkader H 404	Alexandrou E C 30
Abdel-Wahab L 286	Allen T 328
Abdoulkarimov Kh A 361	Allewelt A L 249
Abe H 286	Alliance Color & Chemical Corp 169
Abegg H E O 101	Allied Chemical Corp 24, 35, 68, 76, 99, 163, 164, 168, 198, 204, 239, 290, 362, 392, 393
Abou-Zeid N Y 326	Allsopp D 67
Abrahams D H 73, 248	Amberg R 253
Addressograph-Multigraph Corp	American Aniline Products 196
103, 170, 247	American Association of Textile Chemists and Colorists
Adolff J F 29	Hudson Mohawk Section 207
Advance Finishing 246	Metropolitan Section 168, 321
Agfa-Gevaert (see also Gevaert-Agfa)	South-eastern Section 201
24, 26, 97, 99, 134, 162, 165, 240, 284, 289, 292, 293, 394, 401	American Cyanamid Co 22, 26, 34, 71, 133, 163, 167, 193, 198, 199, 206, 243, 251, 286, 290, 292, 293, 299, 322, 353, 356, 357, 360, 396, 398, 400, 401
Air Production Co 130	American Hoechst Corp 166
Air Products & Chemicals 130	American Optical Co 34, 166
Aklan G 323	American Screen Process Equip. Co 389, 401
Aktiengesellschaft der Oesterreichischen Fezfabriken 33, 76	Anchor Hocking Corp 135
Albrecht W 102	Anderson C A 74
Albright & Wilson (Mfg) 23, 130	Andrew Engineering (Nottingham) (PC) 18, 352
Alburger J R 398	

Andrews B A K 326	Automation Committee (Sy) 438
Andrianov K A 169	Avisun Corp 252
Anelinas A E 328	Aziende Colori Nazionali Affini 68, 99, 357
Angliss I B (C) 145	Azzola F K 35
Antaki A S 207	
Apperley T W J 75	
Arai Y 23	
Arcoria A 97	
Argus Chemical Corp 34	
Arkansas Co 31	
Armour Industrial Chemical Co 193, 294	
Arney W C 326	
Aronoff E I 163	
Arthur J C 248	
Asahi Kasei Kogyo 251, 363	
Ash M A 400	
Ashland Oil & Refining Co 35, 243, 249	
Ashmead B V 287	
Asquith R S (Corr) 14, (C) 116, 167, (C) 181, 279, 323, (C) 334	
Ateya K 249	
Atha K E 352	
Atsumi M 194	
Atto A T 296	
Augusta Chemical Co 287, 288	

Badertscher W 31, 297
Badische Anilin- & Soda-Fabrik (PC) 18, (PC) 19, 22, 24, 25, 28, 31, 33, 67, 69, 71, 74, 75, 76, (PC) 94, (PC) 95, 98, 99, 103, 131, 134, 193, 194, 195, 197, 198, 238, 240, 244, 247, (PC) 280, 281, 287, 292, 300, 326, 353, 355, 356, 391, 392, 401
Balasubramanian V 97
Ballard J 73
Balli H 97
Bal'skii A L 360
Ban K 403
Baramboim N K 295
Barda H 248
Barlowe L 360
Barnes C 249
Barnes J W 328
Baron H 298
Bartholomew R F 354

- Bassilios H F 316  
 Batunova N A 23  
 Bauer J 171  
 Baugh P J (C) 81  
 Baumgarten U 73  
 Bax J C 28
- BDH Chemicals 238
- Beal W (P) 329  
 Bechter D 171  
 Beckmann W 102  
 Beek H C A Van (C) 87, (C) 342  
 Beh F 328  
 Belen'kii L I 323  
 Belin R E 74  
 Bell J R (Sy) 432  
 Bell S H 398  
 Bellmann Eugen Maschinenfabrik 192  
 Beloit Corp 192  
 Beltsov V M 245  
 Bemaent E 246, 360  
 Bendak A 104  
 Bender U 36, 208  
 Benerito R R 398  
 Benisek L (Corr) 277  
 Bent C J (BDC) 60  
 Bentham Brothers & Co 389  
 Berard W N 244  
 Berbeco G R 103  
 Berg H 294  
 Berger W 328  
 Bergholtz N R 192  
 Beris Industries 389  
 Berk 238  
 Bernheim W 402  
 Berni R J 398  
 Bershev E N 325  
 Bertolina G 295  
 Betz Laboratories 66, 353  
 Beutell K K 325  
 Beutler H 30  
 Bevis Industries 21, 352  
 Bevoort C 362  
 Bezhuashvili T B 322
- Bhagwanth M R R 206
- Biedermann W (P) 105, 327  
 Bielen R 101  
 Bigler N 200  
 Bil M 354  
 Bille H E 32, 202  
 Birke W 391
- Blackburn S (Sy) 473  
 Blanchard E J 205, 248  
 Blanckenhorn R 200  
 Blandin Paper Co 136  
 Blankenburg G 171, 325  
 Blin M F 101  
 Blouin F A 75, 103  
 Blumenstein C R 245
- Bohyrenko Yu Ya 164  
 Boehringer Mannheim 171, 328  
 Bogacheva V S 361  
 Bolomey R A 194  
 Bondarenko V M 390  
 Boos A G de 249, 298  
 Booth A K (Miss) 323, (C) 334  
 Boseki Toyo 352  
 Bosworth L N 35  
 Bottger F 284  
 Boute E 29  
 Bovenizer G W 244  
 Bowden J T (Sy) 422  
 Bowles A H 200  
 Bowman M C 326  
 Bowrey M 287
- Brach E J 300  
 Bradbury J H 249, 399  
 Bradley W (R) 65  
 Brands H J 192  
 Brannan M A F 32, 103
- Braunschweig T D 237  
 Bresler H 170  
 Bridgeman T 300, 364  
 British Standards Institution 24, 33, 207  
 British Titan Products Co 243, 293, 398  
 Broadbent L D 248  
 Brockes A 404  
 Brockway Glass Co 36  
 Broll W 193  
 Brookes J H (C) 12  
 Brosch A 300  
 Brunnschweiler E 32, 104, 202  
 Bruno J S 325  
 Bruyas J 36  
 Bry R E 326  
 Brysson R J 244
- Burgh N van der 75  
 Burke O W 293  
 Burkhardt G 205, 248  
 Burlamacchi L 390  
 Burley R W (Corr) 279  
 Burlington Industries 75, 204, 206, 403  
 Burnham R W 36  
 Burnley Thomas & Sons 322  
 Burrell H 398  
 Burrill P M 287  
 Burtonshaw D 204  
 Buser Fritz A G Maschinenfabrik 20  
 Butterworth G A M 74  
 Buxton J C W (Sy) 415
- Byrne G A (Sy) 496
- C**
- Cabot Corp 27, 96, 162, 166, 197, 293, 397  
 Caglioti L 353  
 Caldwell H A 246  
 Caldwell J B 171  
 Calgon Corp 206  
 Camrex 244  
 Candau R 101  
 Cangemi S J 171  
 Canon Camera Co 32  
 Capponi M 203  
 Carr W 23, 244, 398  
 Carruthers G A 192  
 Carter R V 247  
 Cartiere Ambrogio Binda 398  
 Carves Simon 237  
 Carven N A 32  
 Casnocha J A 102  
 Cassella Farbwerke Mainkur AG 30, 98, 132, 195, (PC) 281, 286, 354, 392  
 Cassels J W 104  
 Cate A L 323
- CDTRA 285
- Cednäs M 402  
 Cegarra J (C) 149, 246, 361  
 Celanese Coatings Co 135, 244, 398  
 Celanese Corp 72, 76, 170, 193, 245, 250, 295, 327, 360, 399  
 Centre Technique du Cuir 34  
 Cermiani A 97
- Champion Products 294  
 Chan D K (C) 181  
 Chan R K S 298  
 Chance L H 238, 363  
 Chanden Coatings 244  
 Chapman S J (Corr) 120  
 Chasan A A 317  
 Chatterm Drug & Chemical Co 353  
 Chemiefasernkombinat Schwarz VEB 324  
 Chemiekombinat Bitterfeld VEB 392  
 Chemische Fabrik Pforsee 75, 163, 299  
 Chemische Werke Albert 284  
 Chemische Werke Hüls 294  
 Chemische Werke München 359  
 Chemolene Co 398
- Chereiskii Z Yu 29  
 Cherry Tree Machine Co 246  
 Chevron Research Co 294, 403  
 Chibisov A K 67  
 Chickering K D 300  
 Chisso Corp 245  
 Christie J R (Corr) 231
- CIBA 23, 24, 69, 70, 71, 73, 100, 103, 133, (PC) 160, 168, 195, 196, 197, 203, 238, 239, 241, 242, 243, 247, 288  
 CIBA-Geigy 246, 286, 287, 288, 289, 290, 291, 295, 297, 322, 355, 361, 363, 393, 396, 397, 398, 400
- Clairol 24, 31, 194, 358  
 Clark J R 390  
 Clarke F J J 364  
 Cleaveland G B 74  
 Cluett, Peabody & Co 35, 191, 389
- Coates E (CMC) 379  
 Colgate-Palmolive Co 75, 193, 286, 390  
 Collishaw P S 253  
 Columbian Carbon Co 191, 237, 244, 294, 359, 393  
 Cominco 398  
 Commercial Solvents Corp 22  
 Compagnie Pechiney 103  
 Compton J 75  
 Connor J (AC) 54  
 Continental Can Co 30, 249, 294  
 Continental Oil Co 390  
 Cook C C (Corr) 157  
 Cook J R 205  
 Cooper H R (Sy) 451  
 Corbière J 244  
 Corbishley G S A (P) 329  
 Cosden Oil & Chemical Co 170, 199  
 Cote E 247  
 Cotton Producers Institute 33  
 Cotton, Silk & Man-made Fibres Research Assoc 172  
 Courtaulds 29, 31, 74, 167, 204, 353, 399  
 Courtaulds North America 399  
 Cowan J C 300  
 Cowper R M 200  
 Cox T C 30  
 Coyle J J 33
- Cralite & Chemical Products 238  
 Crane (PC) 160  
 Craven B R 239  
 Crawshaw G H 326  
 Cretwell W G (Corr) 14  
 Crompton & Knowles Corp 287, 393  
 Crosfield, Joseph & Sons 95, (PC) 281  
 Crumley F G 326  
 Crystal Tissue Co 324
- Csüros Z 296
- Cuculo J A 325  
 Cullinane M J 21  
 Customark Corp 170
- D**
- Da Chow C 322  
 Daehne S 102  
 Daigle D J 22  
 Dainichiseika Color & Chemical Mfg Co 292  
 D'Alelio G F 238  
 Dan River Mills 299  
 Danberg V 199  
 Dangerfield J E 33  
 Dansizer C J 402  
 Dart Industries 29  
 Daruwalla E H 97  
 Dashevskaya B I 237  
 Datacopy 298  
 Datyner A (Corr) 231, 239, (C) 263, 295  
 Dave M K 239, 316  
 Davidson H R 254
- Davidson R S 354  
 Davies I (AC) 54  
 Davies R 207  
 Dawson R 246  
 Dawson T L 31, (Sy) 473  
 Day S (CMC) 379
- Dean R D 104  
 Deep Dye Processes 389  
 Deering Milliken Research Corp 75, 76, 170, 206, 250, 251, 299, 390, 403  
 Degremont 22  
 DeGruy I V 297  
 Dehler H G 20, 30  
 Deiner H 402  
 Delaney M J (C) 263  
 Delmenico J (Corr) 61, 205, 298  
 Demidova N V 325  
 Denki Kagaku Kogyo 136  
 Derminot J 398  
 Deschler O 207  
 De Soto 294  
 Deutsche Gold- und Silber Scheideanstalt 246
- Diamond Alkali Co 131  
 Diamond Shamrock Corp 76, 170  
 Diamond Walnut Growers 167  
 Diemunsch J 21, 322  
 Dietrich K 359  
 Dietzen Eugene Co 239  
 Dinse H D 328  
 Di Pietro J 248  
 Diriwachter H 191
- Dmitrieva L N 29  
 Dmitrieva Zh V 325
- Dobilene A K 104  
 Donaldson D J 22, 32  
 Donoghue M J 205, 325  
 Dorofeenko G N 164  
 Dow Chemical Co 200, 237, 238, 247, 252, 293, 363, 390, 398  
 Dow Corning Corp 33, 163, 170, 204, 238, 250, 251, 294, 324  
 Dowling D G 398  
 Downey W W 294
- Drake G L 22, 32, 35, 298, 326, 363  
 Dreher D F 21  
 Drysdale & Co 66
- Dubbini R 362  
 Duckworth C 250  
 Ducrot M 254  
 Dunlop Co 75, 131, 244, 250  
 Duplan Corp 96  
 Durand & Huguenin 164, 359  
 Durrans J (CMC) 379
- Dyatlova N M 23
- E**
- Eastman Kodak Co 21, 25, 32, 35, 68, 74, 76, 97, 132, 134, 164, 165, 166, 167, 168, 169, 172, 195, 196, 197, 208, 239, 240, 241, 242, 247, 252, 285, 287, 289, 290, 291, 292, 293, 297, 298, 324, 354, 355, 357, 362, 363, 391, 393, 394, 395, 396, 397, 399, 401, 404
- Eckelt M 404  
 Eckert R E 36  
 Eckhardt C (P) 365
- Egerton G S (RP) 223, (RP) 268, 295, 399  
 Eggs H O W 67  
 Eggleston W S 389  
 Egli H 202  
 Egorov N V 322
- Eidie Sangyo 299

- Einsele U 362  
Eissler R L 28  
Eitel K 400
- Elder H M 402  
Elitex-Závody Textilního Strojrenství 284  
El-Kashouti M A 246, 295  
Elm A C 244  
El-Mariah A A R 323, 400  
Elsinger F J 252  
Elsner O 72  
El-Thalo Th Abd 316  
Eltz H U von der 73, 202, 296, 317, 391  
Elzer P 30
- Emerson & Renwick 170  
Emery Industries 163  
Empire Piece Dyeing & Finishing Co 247, 389
- Engelhard Minerals & Chem Corp 397, 404  
English Clays Lovering Pochin & Co 27, 76, 135, 295  
Enterprise Minière et Chimique 167
- Ermilov P I 23  
Ernst E 20, 30  
Erukhimovitch M V 361
- Esser H 325  
Esso Research & Engineering Co 35, 254, 294
- Evans D G (BDC) 60, 296
- Ewert K H 328
- Exbrayat P E 101
- F**
- Fab-Con Machinery Development Corp 192  
Fabriques de Produits Chimiques de Thann et de Mulhouse 27, 397  
Fahmy Y 167  
Fairless J 28  
Farbenfabrik Wolfen 198  
Farbenfabriken Bayer (PC) 19, 25, 26, 27, 31, 69, 72, 99, 101, 134, (PC) 160, 164, 170, 194, 198, 199, 238, 240, 242, 244, 247, 251, 252, (PC) 281, 288, 291, 293, 294, (PC) 314, 324, 354, 356, 358, 359, 360, 361, 391, 392, 393, 398, 400, 404  
Farbwerke Hoechst (PC) 19, 24, 25, 30, 73, 97, 98, 103, 132, 133, 136, (PC) 160, 193, 194, 199, 243, (PC) 281, 282, 286, 290, 291, 292, 294, 297, 324, 327, 353, 354, 355, 356, 358, 359, 361, 391, 392, 394, 396, 400, 401  
Farrell J J 20  
Faruq M O 402  
Faulhaber G 32
- Fein M L 239  
Feldtman H D 74  
Fell E T 207  
Fell K T 32  
Ferentzi & Kessler 364  
Ferguson A S (C) 187  
Ferrania 68
- Fiber Industries 399  
Fiebig D 23, 171, 316  
Fikman V D 400  
Filachione E M 239, 404  
Filmfabrik Wolfen VEB 68, 291  
Fink-Jenson P 404  
Firma Werner Kamman 192  
Fischer K H 296  
Fischella S 97, (Corr) 348
- Flecken 20  
Flores L (C) 304  
Floru L 286  
Flower J R (Corr) 278
- FMC Corp 22, 66, 130, 162, 200, 206, 246, 360, 404
- Fobman I V 360  
Fong W 33  
Ford Motor Co 244, 294, 398  
Forrester R C 246  
Forst T 202  
Fortess F 328  
Foseco Trading 244  
Fournier A 237  
Fownes Brothers & Co 352
- Frädrich P 323  
Française des Matières Colorantes SA (PC) 314  
Frangi G 363  
Franke W 402  
Frauchiger H 102  
Frauenknecht J 102  
Freeport Sulphur Co 398  
Freytag R 254, 322  
Frick J G 103, 169, 205, 248, 326, 402  
Friedman M 104, 402  
Friele L F C 328  
Frolov V A 391
- Fuji Photo Film Co 292  
Fuji Shashin Film 24, 68, 70, 136, 166, 239, 241, 247, 284, 291, 298, 358  
Fukui Seiren Kako 192  
Fukushima S 286  
Furness W (Sy) 514  
Furniture Industry Research Assocn 201
- G**
- Gagarine D M 75  
Gailey I (Sy) 432  
Gailey R M 200  
Gall L 299  
Gallagher N H 314  
Gamalet V G 97  
Gamarra J P 248  
Gandu-Dorel L A 254  
Garnett C S 252  
Gartseva L A 164  
Gas Heat Engineering Corp 201  
Gasparic J 253  
Gast L E 27, 300  
Gaussens G 101  
Gautreaux G A 103, 205, 325  
Gavet M 248
- Gebert K H 323, (Sy) 509  
Gehrlein R 324  
Geigy Chemical Corp 67, 291, 297  
Geigy J R (PC) 19, 30, 31, 69, 71, 100, 102, 132, 134, 196, 197, 198, 204, 238, 241, 242, 247, 287, 297, 355, 358, 361, 395, 396, 400  
Geigy (UK) 97, 103, 241  
General Aniline & Film Corp 34, 68, 73, 134, 164, 165, 167, 168, 199, 204, 247, 249, 251, 289, 291, 298, 327, 354, 355, 389, 391, 393, 396, 401  
General Electric Co 34, 168, 252, 295  
General Mills 237, 285  
General Motors Corp 244  
Georgia Kaolin Co 135, 166, 293, 397  
Georgov W 317  
Gerber & Co 284  
Gerber H 203, 322, (Sy) 458  
Gerteis R L 244  
Gevaert-Agfa (see also Agfa-Gevaert) 25, 31, 70, 196, 298
- Giessmann H 66  
Gilbert S M 75
- Giles C H (C) 301, 328  
Gillette Industries 26  
Gils G E Van 254  
Gioges G 203  
Giumanini A G 353
- Glabisheva T Kh 360  
Glanzstoff-Fabriken AG 103, 168, 204, 284, 399  
Glover B (P) 365  
Gluzman M Kh 237
- Godfrey E A 193  
Goldsbrough K 294  
Goldschmidt 293  
Goldsmith M T 74  
Goldstein H B 204  
Golomb L M 23  
Golubtsev S A 169  
Goodrich B F Co 327  
Goodwin A W 103  
Goodyear Tire & Rubber Co 76, 162, 168, 170, 286, 297  
Goorhuis H 202  
Gordon A F 72  
Gordyeyeva N V 360  
Gorelik M V 360  
Gorshtein A E 287
- Grace W R & Co 192, 244, 252, 322  
Graeb R 191  
Graf F 254  
Graham C O 248  
Grant J N 249  
Greaves, Joshua & Sons (PC) 19  
Green T (EP) 48  
Greenstein L M 194  
Grenner D 325  
Grey J (Corr) 63  
Grindea M 202  
Groiser N S 361  
Gromov V F 245  
Groom J R 244  
Grosjean M P 205  
Grossman V B 207  
Grosswang H 254  
Grusdeva A N 246
- Gudgeon R P 191  
Guice W A 32  
Guiliani A 135  
Guier F 207  
Gulbins K E 32  
Gulf Oil Corp 251  
Gund F 364  
Gupta A K Das 239  
Gutberlet W 254
- Gvarini G 390
- H**
- Habar G 404  
Hablützel E 315  
Hade M F El 323  
Haelters M 102, 201  
Hagege R 104  
Hägele G 402  
Haigh D (P) 77  
Hairston W P 172  
Halboth H 404  
Halken J K 404  
Hallas G (C) 189, 279  
Halmi G 33  
Handley J M 36  
Hanganu E 201  
Hannam P H 204  
Hanslam R 328  
Hanson D (Corr) 350  
Harenberg O 170  
Harker R P (Sy) 481  
Harper R J 205, 248, 249, 325  
Harris S L (Corr) 14  
Harrison Mayer 135  
Hartler N 101  
Haruna E (C) 309
- Hashmi P M 72  
Hassenboehler C B 249  
Haug R 207  
Hausermann J L 315  
Haydel C H 35  
Hayes L P 23  
Haynes R R 31
- Heath G A 31  
Hebeish A 245, 316  
Heertjes P M (C) 87, (C) 342, 398  
Heffner L L 32  
Hefti H (P) 365  
Hegedüs H 363  
Heid C 202  
Heidemann E 170  
Heidemann G 325  
Heiges E O J 361  
Heinisch K 205  
Heinisch P 168  
Heinrich H 30  
Hemming M L 237  
Hencke D 191  
Henkel & Cie 99, 193, 238, 244, 285, 390, 397  
Henkel H 360  
Henning H J 328  
Hensley L C 241  
Herbert C G (Corr) 157  
Hercules 22, 170, 206, 254, 397  
Hermes J 403, 404  
Herrmann G 102, 201, 296  
Hervey J D 328
- Hickmott P W 286  
Hida M 72  
Higginbotham R S 400  
Hilados y Tintes Soler 401  
Hildebrand D 30, 201, 399  
Hildebrand W 360  
Hilden J 199  
Hilgeroth E 204  
Hill A R 328  
Hindman W S 172  
Hirano Kinzoku 104  
Hirata T 202  
Hirning H 73, 203  
Hitachi Chemical Co 252
- Hodogawa Kagaku Kogyo 164, 247, 361  
Hoesch-Chemie GmbH Duren Chemie 250  
Hoffman-La Roche 134, 208, 396  
Hoffman W 254, 364  
Hoffmann A S 103  
Hoffmann E 294  
Hoffmann K 168, 364  
Hofstetter R 73  
Holker J R 104  
Holland G (Sy) 488  
Holst-Wallin E-M 402  
Holt L A 167  
Homeister W 286  
Honeywell-Atlas 136, 206  
Honjyo K 172  
Hooker Chemical Corp 22, 205, 206, 246, 250, 327, 403  
Horizons Research 70, 169, 248  
Horkay F 294  
Hotuta T (C) 309  
Houston W H 35  
Houtepen C (C) 87
- Huber J M Corp 20, 27, 243, 294, 397  
Hudson N E 300, 364  
Hueck H J 67  
Hughes J A 365, (P) 371, (Sy) 463  
Hunt & Moscrop 297  
Hunt Rodney Co 20  
Hurley W H 172
- I**
- Iida H 23  
Iijima T 101

- Iford 26, 32, 99, 241, 289, 291, 297, 356, 357, 395
- Imperial Chemical Industries 24, 28, 29, 33, 67, 68, 69, 70, 71, 72, (PC) 95, 98, 99, 100, 101, 132, 133, 134, 135, (PC) 161, 170, 195, 196, 198, 205, 240, 242, 243, 246, 252, (PC) 282, 283, 290, 297, (PC) 314, 324, 327, 328, 353, 356, 357, 360, 394, 395, 400
- Impianti Everest L Calcaterra 30
- Impola C N 33
- Inca Inks 135, 244
- Indian Jute Industries' Research Assocn 250, 363
- Industria Lavorazioni Metalli Antiacidi 30
- Industrial Dyestuff Co 131
- Ingham D J 296
- Inmont Corpn 206
- Inoue H 286
- Institutul Pentru Planuri de Amenajare si Constructii Hidrotehnice 285
- International Bronze Powders 397
- International Business Machines Corpn 74, 167, 239, 244, 298
- International Copper Research Assocn 294
- International Paper Co 298
- International Polaroid Corpn 133
- International Synthetic Rubber Co 250
- Irick G 239
- Ischi A 327
- Ishak I G H 36, 254
- Isings J 75
- Issa R M 286
- Itek Corpn 247, 248, 293
- Ivanova M I 23
- Iwadare Y 72
- Iwamoto H (C) 309
- Iwata A 297
- IWS Nominee Co 299
- Iyer S R S (C) 338
- J**
- Jacobs E S 207
- Jacquement J 104
- Japan Gas Chemical Co 244
- Jayaram R (C) 338
- Jeffreys John (PC) 95
- Jelinek Z K 207
- Jennissen H 283
- Jhala P B (Corr) 349
- Johns-Manville Corpn 193, 243
- Johnson A (R) 65, 280
- Johnson & Johnson 249, 363
- Johnson, Matthew & Co 31, 135, 293
- Johnson S C & Son 238
- Johnston R J 299
- Jones B W 248
- Jones D M (Sy) 496
- Jones F (C) 304
- Jones F W 328
- Jones Gas Process Co 135
- Jurgensen H 36
- Jusztli I 398
- Jyokoji N 286
- K**
- Kabushiki Kaisha Polymer Kako Kenkyujo 284
- Kabushiki Kaisha Ricoh 98, 103, 169, 239, 292, 298
- Kalinskaya T V 203
- Kalish J 400
- Kalle 31 76, 290, 293
- Kalliopin L E 169
- Kamei M 245, 246, 286, 295, 316, 326
- Kanagafuchi Boseki 33, 245
- Kanagafuchi Kagaku Kogyo 401
- Kansai Paint Co 294
- Kantner G C 30
- Kantouch A 104
- Kantschev E 325
- Karpova I N 246
- Karyagin A V 67
- Katayama A 205
- Kawakami T 403
- Kendall Co 404
- Kendrich T C 287
- Kennedy J G 239
- Kerr R J 249
- Keszthely A 194
- Keuser U 102, 203
- Kewanee Oil Co 24
- Khan A H 72
- Khan F 74
- Khan K A 72
- Khananashvili L M 169
- Kharkharov A A 246
- Khemangkorn V 404
- Khmelnitskaya E Yu 239
- Khteranovich O G 239
- Kilpatrick D J 101
- Kimberley-Clark Corpn 76, 246
- King J A E (Sy) 485
- King M G 171, 295
- Kinney J A S 300
- Kinyosha Co 21
- Kiprianov A I 164
- Kirner U 200
- Kirsanov A V 317
- Kissa E 404
- Kitao T 286
- Klebanow B 404
- Kleber R 205
- Klein M 104
- Kleindienst M 359
- Klemin N G 246
- Klemm M 191
- Klesper H 298
- Klopper H 252
- Klust G 171
- Klyachko A 391
- Knerr G 67
- Knott J 295
- Knyagina I P 286
- Koch H J 75, 203
- Koch U 286
- Kodintsev V I 361
- Koedam H 29
- Koenig N H 402
- Kohler E 171
- Kohnstamm H Co 166
- Kollmorgen 283, 300
- Komar L C 299
- Komatsu K 244
- Komissarov S A 295
- Kondelka Z 203
- Konig W 33
- Königs R 361
- Konishi K 286
- Konishiroku Photo Industry Co 24, 68, 165, 291
- Konkin A A 322
- Konrad Peter 20
- Kopel'man D Sh 361
- Kopke V 75
- Koppers Co 166, 286, 324, 356
- Koratron Co 169
- Korchagin M V 361
- Kores Manufacturing Corpn 169
- Korner K 101
- Kornerup A 404
- Koroskys M J 326
- Kotelkov I Z 239
- Kothawala K C 296
- Koussens B 21, 296
- Koval V V 102, 103
- Kovbin'ka A T 23
- Kovzhin L A 361
- Kozlov N S 97
- Kozlov O F 76
- Krantz H 130
- Krasnov K S 164
- Kratochvil V 207
- Krentz V 208
- Kresse P 72
- Kretschmer A 36
- Kretschmar W 31
- Krichevskii G E 102, 201
- Kruger I 130
- Kruger P J 207
- Krüger R P 32, 202
- Kruglov V K 361
- Kuehni R 253
- Kuhn A T 390
- Kullman R M H 248
- Kumanotani J 244
- Kupper H 401
- Kurashiki Rayon 170, 251, 352
- Kurth R H 172
- Kurtz L D 403
- Küstern Eduard Maschinenfabrik 192, 389
- Kuwaida R M 97
- Kyowa Hakko Kogyo Co 252, 291
- L**
- Labib A 323
- Lambrinou I 32
- Lancy Laboratories 237
- Landwehr R C 33
- Lang G 352
- Lang J H 326
- Langenthal W von 74
- Lantor 251
- Laporte Titanium 27, 135
- Las L 203
- Lashina L V 29
- Lastovskii R P 23
- Laube B 404
- Laube E 404
- Laughlin K C 298
- Lauder H F 245
- Launer H F 322
- Lausch D 33
- Lawson D R 249
- Lawter Chemicals 398
- Lawton J B (C) 81
- Leaver I H 239
- Leeder J D 249, 328, 399
- Leemetal 284
- Lehmann H 204, (Sy) 458
- Leiffel F 162, 360
- Leitner H 200
- Lejeune M X 102
- Lem W J 96, 390
- Lemaire F 101
- Lemin D R (P) 257, 296
- Lenka S 354
- Lennox F G 101
- Lepikhova S V 23
- Lever Brothers Co 166, 238
- Lewis D M 202
- Libona Yu Yu 104
- Liddiard A 207
- Limb Y 72
- Lin T H 402
- Lincke G 97
- Linn J 403
- Lipson M (C) 145
- Litherland A (Sy) 488
- Little A H (P) 137
- Lloyd A O 67
- Lockett A P 280
- Loeb L 101
- Lofton J T 248
- Lohmeyer S 253
- Lonza 294
- L'Oreal 27, 69, 285, 290, 293, 296, 324, 358, 363
- Lowenstein M & Sons 21
- Lowndes M R 390
- Lubrizol Corpn 130
- Lukas G 404
- Lyubliner M A 246
- M**
- MacAdam D L 208, 253, 300
- Macarthur M E 245
- Macaulay H H 316
- McCall E R 104
- McCormick P Y 204
- McCoy L E 21
- McDonnell Douglas Corpn 244
- McDowell W 168, 323
- McGraw Edison Co 191
- Machylaitite D I 104
- Mack R 102
- McKelvey J B 398
- McKillop W J 33
- MacLaren F G 101
- McLaren I F 402
- McLaren K (Corr) 159, 299
- McManis G E 27, 300
- McNeil Laboratories 67
- Maes E C 29
- Maddocks R C 172
- Magal'nik A S 103
- Magnaflux Corpn 243
- Mahala H L 239, 316
- Mahall K 35
- Mahapatra P K 317
- Maikowski M A 398
- Management Research Laboratories 248
- Mani K V S 194
- Manjekar T G 206
- Manufacture de Produits Chimiques Protex 361
- March N J 34
- Marchon Products 353
- Marcou M 29
- Markezich A R 35, 363
- Marschner W 201
- Marsden J 360
- Martin L F 75, 103
- Martin Marietta Corpn 71, 164, 169, 239, 290
- Martin W H 75
- Maschinenfabrik Friedrich Haas 389
- Maschinenfabrik Turner 192
- Masoor A A 245
- Matetskii A I 103
- Matsuda G 361
- Matsunaga Y 286
- Matsushita Electric Industrial Co 397
- Matthews J H 31
- Mäusezahl 73, 296
- Mayer F 298
- Mayfield H 325
- Mazingue G 296
- Mead Corpn 162
- Mechells J 364, 404
- Mehendal S H 391
- Meier P 32
- Meier-Windhorst Artos Dr Ing 20, 31, 73, 96, 192, 250, 322, 352, 401



- Meier-Windhorst C A 401, 403  
 Meisei Chemical Works 163, 361  
 Meiser C H 328  
 Melnikov B N 23, 246, 296, 323  
 Menoid R 399  
 Mesrob B 169  
 Metallgesellschaft 237  
 Metzler H 203  
 Meyer A 389  
 Meyer G 74, 325  
 Mezheritskii V V 164
- Midland Silicones 285, 286  
 Mikhailov V M 169  
 Miles Laboratories 250  
 Miličević B 201, (Sy) 503  
 Miller B 328  
 Miller H Y 237  
 Miller J 172  
 Miller S 35  
 Milligan B 167, 171  
 Millmaster Onyx Co 22, 33, 130, 169  
 Milster H 364  
 Mindrea N 201  
 Minnesota Mining & Manufacturing Corp 71, 131, 135, 170, 193, 196, 242, 251, 288, 401, 403  
 Misra A K 317  
 Mita Industrial Co 136, 247  
 Mitsubishi Chemical Industries 358  
 Mitsubishi Jukogyo 20  
 Mitsui Toatsu Chemicals 358, 403  
 Mitter M 324  
 Mitton M T 252  
 Mitton P B 299  
 Mitton R G 34  
 Miyajima N 286  
 Mizasawa Kagaku Kogyo 131
- Mobarek F 167  
 Mobay Chemical Co 34, 245  
 Mohapatra P K 354  
 Mohr P R 315  
 Moir J (Miss) (Sy) 442  
 Mokrashin S G 285  
 Molnykye 205  
 Molochnikova F E 285  
 Molvar A E 21  
 Monacelli W J 238  
 Monkman J R P (Corr) 16  
 Monsanto Chemicals 252  
 Monsanto Co 29, 35, 36, 76, 135, 167, 169, 244, 251, 299, 327, 353, 362, 400, 403  
 Moreau J P 238  
 Morgan AG (RP) 223, (RP) 268  
 Morrell John & Co 254  
 Morris C E 363  
 Morris N M 104  
 Mortimer K (P) 173  
 Morton International 298  
 Morton M I 244  
 Morton T H 299  
 Moryganov P V 246, 296, 323  
 Movshovich M I 201
- M & T Chemicals 294  
 Mta Muszaki Kemiai Kutato Intezet 243
- Mudd J S 35  
 Mukai T 321  
 Mukherjee K 317  
 Müller W 208, 315  
 Muntefering K H 191  
 Murray A (P) 173  
 Mushkalo I L 164
- N  
 Nagase & Co 206  
 Nalco Chemical Co 22, 130, 163  
 Narsian M G (Corr) 61  
 National Cash Register Co 136, 247, 298, 359, 398
- National Distillers & Chemical Corp 21, 252, 390  
 National Gypsum Co 328  
 National Lead Co 27, 293, 398  
 National Patent Development Corp 244  
 National Research Development Corp 171  
 National Starch & Chemical Corp 130, 238  
 Naumann J 359  
 Navmova I A 323  
 Nayak A 317, 354
- Needles H L 75  
 Nelson M L 171  
 Neptune Microfloc 22  
 Nessonova G D 169  
 Nestvogel H 30  
 Neuhaus L 295, 324  
 Neville Chemical Co 294  
 Newton C 323
- Nicholls C H 326  
 Nieuwenhuis W H M 398  
 Nihon Leather Kogyo 252  
 Nihon Vinylon Co 206  
 Nikolaev A F 390  
 Nikolaeva N N 287  
 Nikolskii B P 286  
 Niconova E A 203  
 Nimeroff I 300  
 Nippon Rayon 21, 33, 66, 205, 245  
 Nishida K 202, (C) 309
- Noble P G (R) 18, (Corr) 61  
 Nonaka M 172  
 Nordby H A 75  
 Nordmeyer K 362  
 Nordon P (C) 12  
 Norman V J 97  
 Normand F L 32  
 Norstrom H 101, 170  
 Norwick B 36, 102
- Nuessler A C 361  
 Nujute 29  
 Nulty A J 30  
 Nunn D M (Corr) 14, 208  
 Nursten H E 296, 327
- O  
 Oakite Products 167  
 Oakley E 253
- Oberdorfer Foundries 328
- O'Connor R T 104
- Odiatui E 295
- Ogawa T 295  
 Oglesby S (Sy) 432
- Okajima S 102
- Olah K 194  
 Olivetti Ing C & Co 74  
 Olsen H C 172
- Onley J W 36
- Oparina Z A 246  
 Oprea I 202, 295
- Orwell R L (Corr) 231
- Osman A 286  
 Osterloh F 202
- Otterburn M S 167  
 Otto B 359
- Otto G 76
- Owen M J 287  
 Owens-Corning Fiberglas Corp 250, 285, 327  
 Owens-Illinois 36
- Oxford Paper Co 76
- P  
 Pacific Vegetable Oil Corp 294  
 Pacific T G 239  
 Pak V D 97  
 Pakshvar A B 400  
 Pal'chevskii V V 286  
 Paper Mate Manufacturing Co 244, 294  
 Pardo C E 33  
 Parfitt G D 287  
 Parikh D V 248, 402  
 Parish G J 400  
 Parisot A 398  
 Park J (C) 111, (C) 114, (Corr) 350  
 Parker Pen Co 167  
 Partridge R 237  
 Pashkevichius V V 104  
 Patel D C 104  
 Patrikeev V V 239  
 Patton E L 72  
 Patton T C 237  
 Paul M S 239  
 Pauli O 298  
 Paulson P 285  
 Paulus W 298  
 Pawlowska Z 326
- Peacock J 294  
 Pearson G P 280  
 Pegg Samuel & Son 130  
 Pennsalt Chemical Corp 28  
 Pennsalt Corp 403  
 Penwaly Corp 356  
 Pepperman A B 298  
 Perera D Y 398  
 Perkins W S 72  
 Permalac Corp 294  
 Perminov E D 322  
 Perrig M 168  
 Perrotti A E 353  
 Petersen H 205, 248, 249  
 Peterson K J 192
- Pfizer Chas & Co 27, 71, 166, 397
- Philadelphia Quartz Co 398  
 Philadelphia Soc. for Paint Tech. 300  
 Philippen H 171  
 Phillips G O (C) 81  
 Phillips Petroleum Co 71, 74, 135, 162, 166, 167, 169, 237, 247, 360, 397
- Pietsch S 171  
 Pijahn F 104  
 Pilyugin G T 23, 97  
 Pittman A G 316
- Platt International (PC) 95
- Polaroid Corp 197, 243  
 Polkowski L 237  
 Pollard S J 101  
 Polychrome Corp 24  
 Polymark 136  
 Polymer Corp 251  
 Pond K 243  
 Ponder L H 171  
 Pont de Nemours & Co Inc E I du 20, 27, 29, 70, 72, 73, 76, 131, 134, 135, 164, 166, 168, 170, 191, 193, 199, 200, 206, 242, 244, 247, 250, 251, 252, 285, 293, 294, 297, 322, 328, 353, 355, 391, 394, 396, 397, 398, 399, 404  
 Porter J B 360  
 Porter J J 21, 72  
 Porvair 327
- Postle R 32
- PPG Industries 36, 66, 75, 244, 284, 293, 397
- Pratt H T 75  
 Prazak G 163  
 Prerovske Strojirny 191  
 Prietzel H 402  
 Prismo Safety Corp 294  
 Proban 327  
 Procter & Gamble Co 67, 99, 163, 166, 238, 249, 291, 353, 390  
 Proctor & Schwartz 192  
 Produits Chimiques Pechiney-Saint-Gobain 252  
 Prorokov N I 246
- Puente P 246  
 Pulp & Paper Research Institute of Canada 399  
 Puri A K (Corr) 14, (C) 116  
 Puscasu E 201, 203
- Pye 208
- R  
 Radar C A 326  
 Raffinerie Tirmontaise 67  
 Ramsbottom J 287  
 Ranganathan S R 402  
 Rankin J K 398  
 Rao A V R 206  
 Ratna Prabhu M (Corr) 349  
 Ratnovskaya E D 360  
 Rattee I D (Corr) 278  
 Rayment J (Sy) 514
- Reddie R N 326  
 Reeves W A 22, 298, 363  
 Reichhold Chemicals 66  
 Reichhold-Albert-Chemie 244  
 Reichstadter B 208  
 Reid J D 32, 103, 169, 248, 297, 326, 402  
 Reidel D 66, 191, 298  
 Reidy J W (O) 233  
 Reifenhauer 170  
 Reinhardt R M 32, 248  
 Reitzer M-Th 101  
 Remisch G 359  
 Renker 297  
 Rensburg Van N J J 201  
 Renziehausen H 201  
 Retzlaff D (C) 87  
 Reuther A 202  
 Revlon 362  
 Rex Laboratories 72  
 Reynolds H H 166  
 Rezk A A 316
- Rhodes W K 29
- Richards D P 244  
 Richardson R W (Corr) 233  
 Richter F 315  
 Richter K 404  
 Richter M 364  
 Richter P 203  
 Richter W 102  
 Ridley W H 191  
 Rieber M 171, 208  
 Rieser E 193  
 Rigg B (CMC) 379  
 Rinse J 358  
 Riphagen J J 208  
 Riskin I V 203  
 Rivlin J 321
- Robbins C 102  
 Robert G 325  
 Roberts E J 32, 103, 402  
 Roberts J G 400  
 Roberts M H (Sy) 451

- Robinson F D 28  
 Robson A 402  
 Rock B M (Sy) 481  
 Rockford Servo Corp 284  
 Rodman C A 21, 353, 390  
 Rogovin A Z 403  
 Rohm & Hass Co 21, 294, 404  
 Röhser H 296, 323  
 Roitman G P 67  
 Roitman J N 316  
 Rome Machine & Foundry Co 192  
 Rosch G 203  
 Rosenbusch K 296, 400  
 Rosinskaya Ts Ya 102  
 Ross C A 237  
 Rosted C O 297, 404  
 Rostermund K H 30, 102  
 Roth P B 390  
 Rouette H K 205, 361  
 Rousselle M A 171  
 Rout M K 317, 354  
 Routhier A 73  
 Rowe M H 322  
 Rowland S P 32, 75, 103, 402  
 Rowlands R J 101
- Rudne a Nerudne Doly 285  
 Ruf J 294  
 Rumens W 205, 248  
 Rumph H 253  
 Rupin M 73  
 Ruppel H 323  
 Rusina M N 23  
 Ruzsnak I 296  
 Ruttiger W 101, 205, 248
- Rydin S 101
- S**
- Sadikova S A 400  
 Sadykov M M 251  
 Safe K A 28  
 Sahai S N 322  
 St Joseph Lead Co 243  
 Sakamoto M 199, 205  
 Salvatore F 68  
 Samco Holding Corp 162, 192  
 Samson A 171  
 Sandoz A G 25, 26, 69, 71, 73, (PC) 95, 96, 98, 100, 130, 132, 133, 163, 167, 168, 195, 197, (PC) 283, 287, 288, 295, 354, 356, 359, 392, 395, 396, 400  
 Sanielevici H 286  
 Sanuki T 72  
 Sanyo Chemical Industries 238  
 Saracz A 294  
 Sato N 102  
 Saueressig J H 389  
 Saunders F C 22
- Scarlat G 97, (Corr) 348  
 Schaafsma K (C) 342  
 Schaetti & Co 191  
 Schappel J W 193  
 Scharf W G 399  
 Schefer W 207  
 Schek M 254  
 Scheller M 101  
 Schelz D 97  
 Schiffer G 36  
 Schiffrer R 359  
 Schlegelmilch F 404  
 Schluter H 73, 203  
 Schmidt G 202  
 Schmidt R 191  
 Schneider W J 27  
 Schnerring K 315  
 Schock E 193  
 Scholten-Honig Research 362  
 Schrum F F 246  
 Schultze W 299, 300  
 Schutz R A 101  
 Schwaebel R 362  
 Schwartz A M 326
- Schwartz S M 34  
 Schwen G 67  
 Schwer D 102  
 Schwuger M J 193  
 Sciutto D 97  
 SCM Corp 244, 294  
 Scott G N 399  
 Scott G V 102  
 Scott M G 362
- Sedor E A 33  
 Seghezzi H 75  
 Seidel M 205  
 Seifert H 391  
 Seivard L I 294  
 Sello S B 363  
 Sel-Rex (UK) 328  
 Seltzer I 202  
 Semenova L F 246  
 Semmelroth C C 172, 253  
 Semperit Österreichische-Amerikanische Gummiwerke 66  
 Senner P 201, 323, 399  
 Serafimov S 169, 325  
 Serakhov A V 103  
 Serbin J 162, 389  
 Serex C 296  
 Sergeant C 21  
 Sericol Group 352  
 Sespadi S 194
- Shabarova N A 286  
 Shah S M A 74  
 Shakra S 286  
 Shamolina I I 286  
 Sharkov V I 322  
 Sharma D D 239, 316  
 Sharp D 316  
 Shawky M 316  
 Shell Internationale Research 23, 244  
 Shell Oil Co 206  
 Shenai V A (C) 228, 322  
 Sherwin-Williams Co 167, 294, 357, 358, 394, 398  
 Shibata K 195  
 Shibusaira T 101  
 Shilova F I 360  
 Shilova G I 296, 323  
 Shindala A 21  
 Shinkorenko S V 97  
 Shizouka Kogyo Co 206  
 Shkrobisheva V I 360  
 Shmukler Yu S 246  
 Shore J (P) 3, (P) 37  
 Showa Denko 361  
 Showa Kagaku Kogyo 131, 289  
 Shunney E L 21, 353, 390
- Sieber J H 74, 204, 323  
 Sievenpiper F 246, 360  
 Silina E I 285  
 Simkins T 300  
 Simmonet G 245  
 Simmons M W 35, 252  
 Simms R J 300  
 Simon-Carves 130  
 Simpson G G (P) 257  
 Simpson W T 286  
 Singh O P (C) 228  
 Singh S 248
- Skaathum O 200
- Slinger J B 237  
 Sklonskii Yu L 239
- Smith B F 75  
 Smith M M 363  
 Smith N B 399  
 Smith P 30  
 Smith P W (Sy) 410
- Società Italiana Resine 20, 27  
 Società per Azioni Ferrania 70, 242  
 Société Anonyme Heurtey 284
- Société Civile Soltex 324  
 Société d'Exploitation des Procédés Sublatic 401  
 Société Rhodiaceta 199, 290, 295  
 Société SEPPIC—Paris 321  
 Société des Usines Chimiques Rhône-Poulenc 28, 242  
 Sodnik M 208  
 Soiron C 73  
 Somm F 203, 322, (Sy) 458  
 Soo Valley Co 250  
 Sorensen P 72  
 Sotton M 104  
 Soutar A H (C) 301  
 Southern Dyestuffs Co (PC) 283, (PC) 314
- Spear K 249  
 Sperry Rand Corp 131  
 Spetsializirovannye Upravleniye No 31 Stroitel'noye Triesta No 1 244  
 Squire D H (Sy) 426
- Stalwart Dyeing Co 389  
 Stamm G 207  
 Stang H P 202  
 Standard Brands 286  
 Standard Oil Co 29  
 Staples M L 172, 249  
 Stas N 402  
 Stashkevich O M 97  
 Stashkevich V V 97  
 Staudtler J S 136  
 Stauffer Chemical Co 22, 238, 353  
 Stein H J 200, 203  
 Stenberg-Flygt 285  
 Stepanov F N 76  
 Stepniczka H 248  
 Sterling Drug 357  
 Stern H 207, 403  
 Sterrett R R 363  
 Stetson E R 246  
 Stetson G R 30  
 Stevens C B (R) 65, (R) 67  
 Stevens C V 75  
 Stevens E C 172  
 Stevens H N E 67  
 Stevens J P & Co 33, 162, 170, 206, 238, 249, 250, 299, 327, 363, 403  
 Stevens M F G 67  
 Stieg F B 28, 294  
 Stigter D 399  
 Stilig H 325  
 Stoll O 201  
 Stolp J A 28  
 Storebest-Ladeneinrichtung 244  
 Stratmann M 171  
 Strelecky I 202  
 Stubbings R 237  
 Sturgeon P Z 252  
 Stutz G 172
- Subrahmanyam K (Corr) 349  
 Sugiyama Y 300  
 Suiter R N 101  
 Sumitomo Chemical Co 70, 288, 393, 394  
 Sumner H H (Sy) 463  
 Sun Chemical Co 163  
 Sun Oil Co 198  
 Sunthakar S V 97, 391  
 Supanekar S D 201  
 Suzawa T 72, 321  
 Suzuki K 354
- Sverbilo A A 361  
 Svensson Ludvig A B 192  
 Svierak O 402  
 Svit 252
- Swain E W 27, 300  
 Swanepoel O A 33  
 Swidler R 248
- Szabo K 323
- Szmulewicz H 201
- T**
- Tadshomme M 398  
 Tainton Co 27  
 Takase Y 295  
 Takeda Chemical Industries 28  
 Talas E 294  
 Tallinsky Politeknicheskyy Institut 398  
 Tarakcioglu I 362  
 Tasaka M 102  
 Tashiro T 199, 205  
 Tatton William & Co 192  
 Taylor B (Miss) (Sy) 463
- Tecnifax Corp 247  
 Todoradze G A 239  
 Tee-Pak 136, 250, 294, 297  
 Teijin 34, 251  
 Temin S M 248  
 Temkina V Ya 23  
 Tenneco Chemicals 34  
 Terent'ev A P 391  
 Tereshchenko G P 390  
 Terrill J B 207  
 Terrington D 296, 298  
 Teruel-Jimenez L 254  
 Tesoro G C 321, 363  
 Texas Instruments 363  
 Textilmaschinenbau Zittau VEB 20
- Thanumoorthy V 97  
 Thater F 104  
 Therachimie Chemisch-Therapeutische Ges 131, 168, 293, 400  
 Thier W 352  
 Thies B Spezialmaschinenfabrik 20  
 Thiokol Chemical Corp 193, 285  
 Thomas F W (AC) 54  
 Thomas R 31  
 Thomson A 64  
 Thomson-Hayward Chemical Co 68  
 Thorsen W J 33  
 Thurner K 354  
 Thwaites J J 315
- Tiefenbacher H 246  
 Tiezzi E 390  
 Tillin S 104  
 Timakova L M 23  
 Time 76  
 Titangesellschaft 27, 199, 243
- Toho Kagaku Kogyo 164  
 Tolgyesi E 326  
 Tolmachev A I 239  
 Toms River Chemical Corp 194, 243, 287, 391  
 Toray Industries 34, 136, 238  
 Torre M (Corr) 348  
 Toth G 76  
 Toyo Ink Manufacturing Co 394
- Trivedi A S 328  
 Troope W 200  
 Trovrad P 171
- Tsuchiya M 354  
 Tsuda K 202
- Tucker H H 323
- Tweedie A S 252
- Tyrner J M 20  
 Tyrrell J J 31
- U**
- Ugine Kuhlmann 67, 69, 131, 134, 197, 242, 288, 289, 290, 292, 356, 393
- Ushoefer H 202

Umezawa H 250

Unilever 130, 208, 242, 285

Union Carbide Corp 22, 23, 25, 28, 33, 238, 244, 299

Uniroyal 29, 137, 167, 237, 245, 251, 299, 399

United Piece Dyeworks 130, 136

United States Plywood—Champion Papers 196

United States Secretary of Agriculture 35, 104, 130, 136, 163, 164, 169, 193, 196, 205, 206, 250, 299, 363, 391, 403, 404

United States Secretary of the Air Force 36

United States Secretary of the Army 251, 253, 351

United States Secretary of the Navy 251

United States Steel Corp 244

Upjohn Co 249

Urseanu F 286

Ushevskii L E 29

## V

Vaeck S V 29, 328

Vail S L 326

Valeron Corp 172

Valk G 326

Valmet Oy 96

Valu F 201, 203

Vanderbilt R T Co 397

Veaute G 73

Venkataraman K 206

Vepa 21, 66, 101, 191, 192, 401

Verburg G B 402

Vereinigte Farbereien 104

Vereinigte Kesselwerke 284

Verhoeff J J M 135

Vernazza J 298

Vernere H 398

Versäumer H 359

Vianova Kunstharz 28

Vido L 326

Vinogradova N P 286

Viola S J 239

Virnik A D 403

Vogel 192

Vogel E 191

Voith J M 352

Vol'f L A 286

Voronkov M G 245

Vyzkumny Ustav Chemickych Vlaken 296

Vyzkumny Ustav Organickych Syntez 69, 131

Vyzkumny Ustav Zuscichtovaci 21, 284

## W

Wabasso 169

Wachsmann H 246

Wacker-Chemie 285

Waddleton N 22

Wade C P 402

Wallace J F 167

Walter H 283, 389

Walter M 399

Walther V 364

Wankelmuth G 254

Warburton F L (Corr) 63

Warden J 249

Warsager R 28, 74

Warwick J J 74

Warwick J G 200

Watanabe H 202

Wayman M 96, 390

Wazir T A 74

Weaver T 30

Weber R 35

Wehner A 205

Weigmann H-D 362, 402

Weigolds S 168, 284

Weiner L I 171

Weingarten R 323

Weinstein R 253

Weintraub J 72

Weise H 364

Weise P 253

Wells J F 172

Wendel D 208

West T B 172

West Virginia Pulp &amp; Paper Co 22

Westfall P M 325

Westrenen W J van 398

Westvaco Corp 162

Whewell C S 74

Whitaker A (Corr) 120

White M A 249, 298

Wilks P A 104

Williams J M 28

Williams M J 249

Wilshire J F K 361

Wilsing H 295

Wilson K W 362

Wiseman L A (Sy) 406

Wissenschaftlich-Technisches Zentrum

Technische Textilien 136

Withey A F 172

Witzel R F 36

Wolf F 286

Wolf H 200

Wolff &amp; Co 244

Woods M 35

Wool Bureau 250

Wool Industry Research Assocn 284

Wright B 237

Wright W D 253

Wrigley M J (Miss) (AC) 54

Wurster J 23

Wurster R F 363

Wyandotte Chemicals Corp 250

Wygand W 296

## X

Xerox Corp 27, 32, 74, 165, 166, 196\*, 244, 290, 397

## Y

Yakubov Kh M 286

Yamase I 361

Yano M 194

Yaroshenko G F 23

Yasnikova A I 203

Yatome C 295

Yehia M 316

Yonemura G T 35

Yorkshire Dyeware &amp; Chemical Co (now Yorkshire Chemicals) (PC) 19, 25, 26, 98, (PC) 161, 162, 194, 198, 240, 391, 400

Yuldashev A 251

Yurchenko R I 239, 317

Yurlova G A 391

Yusupov Z N 286

## Z

Zabotina E A 23

Zahn H 199, 295

Zaitsev B E 323

Zarembo M A 246

Zaslavskaya R G 237

Zeronian S H 32, 244

Zgol R 28

Zhurova I N 239

Zhukauskene D V 104

Ziesenis C H 208

Zimmer J 20

Zimmer P 96

Zimmermann J 352

Zinsli H 36

Zobor V 296

Zollinger H 32, 202, 205, 361

Zolotovskii Ya M 239

Zorli U 207, 300

Zuber C 208

# Index to Subjects

Vol. 87—1971

The method of compiling the Index is essentially the same as that described in the introduction to the subject index of Vol. 79 (p. xxxix). In addition, lectures and communications published in the *Journal* have been more thoroughly indexed, so that entries in the index may refer to one section of a paper rather than to the complete paper. Where the index entry refers to a pattern card, the maker's initials are given in parentheses. Other symbols in parentheses refer to papers published in the *Journal* (see list on page 5).

	PAGE		PAGE		PAGE
<b>A</b>		<b>Acid dyes—continued</b>		<b>Aluminium—continued</b>	
<b>Abrasion</b> and chaffing of aqueous flexographic inks, addition of polyethylene dispersions to improve .. .. .	294	for wool ( <i>ICI</i> ) .. .. .	161	polyhydroxy hydrocarbon complexes, water-soluble, basic .. .. .	353
glass-fibre fabric having improved resistance to resistance, improved, smooth-drying and durable-press finish with .. .. .	250	<b>Acid</b> , reaction with wool ( <i>C</i> ) .. .. .	112	<b>Amic acids</b> , aqueous solutions, pad-bake reaction with cellulose .. .. .	325
— of resin-finished cellulose textiles, improving .. .. .	75	<b>Acidol dyes</b> for nylon carpet yarn ( <i>BASF</i> ) .. .. .	94	<b>Aminimides</b> , polymeric, stabilisation of wool with <b>Aminochlorohydrins</b> , quaternised, as antistatic agents .. .. .	97
— resistant, and crease-recovery finishes .. .. .	193	<b>Acrolein</b> ( <i>see</i> Crosslinking)		<b>Aminoplast—sulphonated phenolic compounds</b> as assistants in leather tanning and dyeing .. .. .	76
— delayed-cure smooth-drying finish for cellulose textiles .. .. .	169	<b>Acryl</b> , Celliton, Palanil, and Basacryl dyes on Clevyl T ( <i>BASF</i> ) .. .. .	94	<b>Ammonia</b> , anhydride, pad-bake reaction with cellulose .. .. .	325
— durably pressed cellulosic textiles .. .. .	403	<b>Acrylamide</b> , methylol compounds for imparting crease-recovery properties .. .. .	163	liquid, fundamental basis of treatment of cotton with .. .. .	200
<b>Abrasive damage</b> caused to 100% cotton durable-press fabrics by washing and drying machines .. .. .	363	— vinyl acetate copolymer size, partially saponified .. .. .	353	— physical aspects of treatment of cotton with — treatment of fabrics with: development of process and plant .. .. .	200
<b>Absorbers</b> ( <i>see also</i> Stabilisers)		<b>Acrylate coating</b> , pigmented, and fluorocarbon topcoat, substrates coated with .. .. .	28	— — fields of application for .. .. .	200
ultraviolet .. .. .	67	<b>Acrylic</b> ( <i>see also</i> Dyeing, Finishing, Flame-resistant, Grafting, Printing)		— treatment of yarns and threads with .. .. .	200
— and antioxidants, polyolefins containing combination .. .. .	29	— butadiene-styrene copolymers, enhancing resistance to discoloration by heat .. .. .	34	<b>Ammonium</b> quaternary compounds, mothproofing with .. .. .	326
— 7-cyanocoumarin .. .. .	67	compositions, dyeable .. .. .	72	<b>Andrew auto-setter</b> .. .. .	18
— method and apparatus for evaluating content of transparent plastics .. .. .	364	compounds, polymerisation on cotton fabrics copolymers, 2-amido-2-alkenesulphonates as monomers for .. .. .	130	<b>Anhydrides</b> , acid, modifying polyester and polyolefin yarns containing basic resins by treatment with .. .. .	167
— polymeric fluorescent brighteners for photographic purposes .. .. .	291, 358	enamels, thermosetting, of high weather resistance .. .. .	321	<b>Anidex fibres</b> .. .. .	361
— for polyolefins, cellulose esters and poly-(vinyl chloride) .. .. .	391	fibres, acidic-group content ( <i>C</i> ) .. .. .	150	<b>Aniline Blue</b> , Sudan III, Quinoline Blue, Naphthol Yellow or Methyl Red, mixture for use in colour radiography .. .. .	359
<b>Acetate</b> ( <i>see also</i> Antistatic, Cellulose triacetate) fabric, raising safe-ironing temperature .. .. .	250	— composition and physico-chemical structure ( <i>C</i> ) .. .. .	149	2,4-dichloro-, production .. .. .	286
<b>Acetone</b> and glucose in water, photoreductions with .. .. .	346	— structural differences between .. .. .	199	4-fluoro-3-nitro-subst. .. .. .	24
hexahalogeno-, — urea adducts as catalysts for modification of cellulose by carboxylic acid .. .. .	33	— substantivity for basic dyes, improving .. .. .	400	polyhalogenated salicylidene, reversibly photochromic .. .. .	131
<b>Acid dyes</b> ( <i>see also</i> Anionic dyes)		flocking systems, statistical procedure for selection .. .. .	325	<b>Anim/8</b> ( <i>see</i> Processing)	
anthraquinone .. .. .	71, 100, 395	or modacrylic polymers, dyed or pigmented, improving fastness to light .. .. .	167	<b>Anionic dyes</b> on nylon fibres: effect of postsetting on dyed and backtanned nylon ( <i>P</i> ) .. .. .	3
azo .. .. .	289	polymers, dyeable with cationic dyes .. .. .	245	— effect of backtanning ( <i>P</i> ) .. .. .	3
— 1:2 chromium-complex .. .. .	288	— stable dispersions of pigments in .. .. .	29	<b>Anodisation</b> , self-coloured, of aluminium .. .. .	103
— pyrimidine .. .. .	132	resin coating composition, self-crosslinking .. .. .	321	<b>Anthraquinone</b> ( <i>see also</i> Dye developers)	
— for wool and nylon .. .. .	288	products substantive to basic dyes .. .. .	252	1-amino-2-halogenomethyl- .. .. .	357
consumption, model of textile and dye market based on .. .. .	36	<b>Acrylonitrile</b> ( <i>see</i> Colouring, Polyacrylonitrile)		1-amino-2-( <i>p</i> -hydroxyphenoxy)-4-hydroxy- .. .. .	71
derived from <i>s</i> -triazine .. .. .	97	<b>Activators</b> for peroxy bleaching agents .. .. .	390	chlorinated, intermediates .. .. .	26
disazo .. .. .	164, 195	<b>Adams-Nickerson colour-difference formula</b> : correction and addenda ( <i>Corr</i> ) .. .. .	159	$\omega$ -halogenomethyl-, compounds .. .. .	395
— for polypropylene .. .. .	69	<b>Adhesion</b> of ink to polyolefins, improving .. .. .	169	1-hydroxy-2-halogenomethyl- .. .. .	356
dyeing properties on tannin-treated nylon .. .. .	5	to polyester film, improving .. .. .	76	-2-sulphonic acid, 1-amino-4-nitro (or amino)- .. .. .	71
for leather .. .. .	131	<b>Adhesives</b> ( <i>see</i> Bonding, Flocking)		<b>Anthraquinone dyes</b> ( <i>see also</i> Acid dyes, Basic dyes, Disperse dyes, Mass-coloration dyes, Reactive dyes, Solvent dyes) .. .. .	165
monoazo .. .. .	354	<b>Aeration</b> and flocculation, apparatus for treating effluents by .. .. .	285	for colouring polyester films .. .. .	197
— and disazo from <i>N</i> -arylsalicylamides and 2-hydroxy-3-naphthamides .. .. .	97	<b>African styles</b> in printing .. .. .	324	dyeing properties on tannin-treated nylon 6.6 ( <i>P</i> ) .. .. .	6
— for nylon .. .. .	392	<b>Aggregation</b> of dyes: scope of application of maximum-slope method .. .. .	72	and intermediates, application of gas-liquid chromatography to analysis .. .. .	207
— and wool .. .. .	131, 288	<b>Ahiba mini-dyeing machine</b> .. .. .	315	oleophilic, for polypropylene .. .. .	396
— pyrazolone .. .. .	393	<b>Air-conditioning equipment</b> .. .. .	191	<b>Anthraquinone pigments</b> .. .. .	165, 395
and natural dyes, pigments from .. .. .	135	<b>Alanine</b> , 3-(4-aminophenyl)disulphenyl-, identification ( <i>C</i> ) .. .. .	117	<b>Anthrimide—carbazoles</b> .. .. .	71
and non-ionic surfactants, interaction between and effect on sorption and diffusion behaviour: sorption of dyes and surfactants on nylon 6.6 fibres from finite baths ( <i>C</i> ) .. .. .	263	<b>Algicides</b> , metal chelates of bicyclononanedione .. .. .	130	<b>Anti-corrosive and flame-retardant paint</b> .. .. .	321
phenylazoaminonaphthol, for wool and nylon .. .. .	289	Alkyd resins, adsorption by titanium dioxide pigments and relation to hiding power of alkyd paint systems .. .. .	294	pigment .. .. .	135
phthalocyanine .. .. .	396	<b>Alumina—titania pigment</b> , co-oxidised, fade-resistant, opacifying .. .. .	293	<b>Antifelt finishing</b> of wool, investigation of various polymer-based preparations used in .. .. .	363
polyazo, for leather .. .. .	355	titanium dioxide pigments containing .. .. .	135	<b>Antifoaming agents</b> .. .. .	238
polymers containing quaternary ammonium groups as mordants for .. .. .	163	<b>Aluminium</b> ( <i>see also</i> Anodisation, Coating, Colouring, Printing)		<b>Antihalation</b> and filter dyes, tri- and pentamethine .. .. .	289
and reactive dyes, disazo and polyazo .. .. .	393	anodised, multicoloured effects on .. .. .	254	<b>Antimicrobial fibrous materials and films</b> .. .. .	403
— for natural and synthetic polyamides .. .. .	396	— bituminous coating composition, coloured, weather-resistant .. .. .	294	finishing, durable, of anionic textile materials — of textile materials .. .. .	298
resist for natural polyamide and synthetic-polymer fibres normally substantive to .. .. .	295	castings, permanently coloured .. .. .	328	<b>Antimony sulphide</b> , use to produce black or dark-coloured electrodeposits .. .. .	359
		pigments, developments in .. .. .	354		



	PAGE
<b>Antioxidant</b> .. .. .	131
light-stabilised photochromic compositions	
containing .. .. .	198
triazine derivatives .. .. .	23
and ultraviolet absorbers, polyolefins contain-	
ing combination .. .. .	29
<b>Antiseptic and rotproofing agents, arylguan-</b>	
<b>amines as</b> .. .. .	286
<b>Antislip, dulling and/or dry-soil-resistant finish</b>	33, 251
<b>Antisoil finish for cellulose-polyester blends</b> ..	327
softening and lubricating finish .. .. .	206
<b>Antisoiling synthetic-polymer fibres</b> .. .. .	360
<b>Antistatic agents, anti-feathering inks containing</b>	245
— durable, metallic fibres as .. .. .	29
— internal, for nylon .. .. .	238
— nylon containing succinic acid imide as ..	72
— quaternary nitrogenous cellulose ethers ..	23
— quaternised aminochlorohydrins as .. ..	97
— for synthetic polymers .. .. .	238
— for thermoplastic polymer films .. ..	252
— urea derivatives as .. .. .	353
device .. .. .	191
finish .. .. .	353
— durable, resinous .. .. .	193
— for synthetic polymers .. .. .	353
— enhancing wettability of synthetic-polymer	
filaments, while simultaneously imparting	
— for hydrophobic textiles .. .. .	33
— for synthetic-polymer fibres .. .. .	251
finishing of woven and knitted acetate fabrics,	
new method for .. .. .	104
properties, durable, modified nylon having ..	167
— improved, nylon having .. .. .	295
— of polyvinylamine derivatives .. .. .	390
<b>Antiviscant finish</b> .. .. .	251
<b>Artos Fluid-o-therm continuous open-width</b>	
<b>system, novel</b> .. .. .	322
<b>Asbestos-cement products, integrally coloured</b>	328
<b>Astrazon dyes for polyacrylonitrile fibres (FBy)</b>	160
<b>Atomisation of colorants</b> .. .. .	244
<b>Auramine O-aryl sulphonate salts with high</b>	
<b>alcohol solubility</b> .. .. .	292
and Ethyl Auramine .. .. .	357
<b>Automatic prediction of dyeing recipes</b> .. ..	254
<b>Automation, complete or partial, of additions to</b>	
<b>dye-liquors with higher accuracy of metering</b>	
<b>and control, computer, on-line, in dyehouse</b>	
<b>(Sy)</b> .. .. .	426
in dyehouse and future (Sy) .. .. .	438
and dyehouse simulation program (Corr) ..	61
of plant without knowledge of electronics	
and process control in textile finishing in-	
dustry, economic significance .. .. .	254
and rationalisation, computers for .. ..	364
<b>Auxiliaries, dye, in application of disperse dyes</b>	
<b>to man-made fibres (P)</b> .. .. .	173
for dyeing and printing with aminoimino-	
pyrrolenines in presence of copper or nickel	
compounds .. .. .	361
use in application of disperse dyes to man-	
made fibres (YDC) .. .. .	19
<b>Auxochromic effect of phosphazo group</b> ..	239, 317
<b>Azamerocyanines and merocyanines derived from</b>	
<b>2-hydroxy-1-naphthaldehyde and 1-nitroso-</b>	
<b>2-naphthol</b> .. .. .	317
<b>Azidium salts: preparation and properties of</b>	
<b>substituted quinolinetriazatrimethincyanines</b>	
<b>Azo aniline and azomethine dyes for photo-</b>	
<b>graphic bleaching-out process</b> .. .. .	318
formates and formamides, aliphatic, as dyes	
modifier, phototropic compositions containing	
-2-naphthols, 1-aryl-, diffuse reflection spectra	
of filter papers dyed with .. .. .	286
<b>Azo dyes (see also Acid dyes, Basic dyes, Direct</b>	
<b>dyes, Disazo dyes, Disperse dyes, Dyeing,</b>	
<b>Food dyes, Hair dyes, Metal-complex dyes,</b>	
<b>Monoazo dyes, Polyoazo dyes, Reactive dyes,</b>	
<b>Stabilising, Trisazo dyes, Vat dyes)</b>	
anthraquinone and benzene-sulphonyl deriva-	
tives, electron absorption spectra .. ..	354
1:2 chromium-complex, for mass coloration	
of nylon .. .. .	194
— for wool .. .. .	132
diffusion coefficients .. .. .	239

## Azo dyes—continued

dry, water-soluble, isolating .. .. .	239
formation of hydrazyl radicals and hydrazo	
compounds by photoreduction (C) .. ..	87
o-hydroxy, cupric complexes .. .. .	239, 316
new .. .. .	316
phenylpyrimidine, quaternised .. .. .	241
photochemistry, in synthetic-polymer fibres:	
effect of concentration .. .. .	239
photoreduction (Erratum) .. .. .	388
— by reducing agents formed on photo-	
excitation of simple aliphatic and aromatic	
compounds .. .. .	342
phthalocyanine, for leather .. .. .	290
preparation, metallised, stable .. .. .	133
pyrazolyl-, quaternised .. .. .	318
pyrimidine .. .. .	355
— for acrylic fibres .. .. .	287
quinazoline, standard heats and standard	
entropies of dyeing (Corr) .. .. .	348
rate of reduction by stannous chloride or	
sodium sulphite .. .. .	295
for silver-dye-bleach process .. .. .	240, 393
starch anthranilates as .. .. .	196
<b>Azo pigments, acridone</b> .. .. .	133
containing imide groups .. .. .	133
X-ray diffraction data for (Corr) .. ..	120
<b>Azoic composition for dyeing polyester or tri-</b>	
<b>acetate fibres</b> .. .. .	24
coupling components .. .. .	239
— 3-hydroxy-N-naphthyl-2-naphthamides as	
dyes, application to cellulose triacetate and	
polyesters .. .. .	73
— and disperse dyes for dyeing polyester	
fibres (ICI) .. .. .	282
— future in dyeing .. .. .	168
<b>Azomethines, new, and intramolecular copper</b>	
<b>complexes, synthesis from condensation</b>	
<b>products of o-aminophenol and aromatic</b>	
<b>amines</b> .. .. .	391
synthesis of phosphorus-organic compounds	
from: preparation of aryl(arylaminomethyl	
diethylphosphates .. .. .	97
synthesis and spectra: derivatives of 1-aryl-	
lepidinyl salts .. .. .	97

## B

<b>Backcoating fabric webs</b> .. .. .	34
<b>Backtanning, effect on dyed nylon (P)</b> .. ..	3
<b>Bacteria, slime-forming, synergistic mixtures for</b>	
<b>control</b> .. .. .	22
<b>Bactericidal detergent</b> .. .. .	238
and fungicidal agents .. .. .	238
softening and emulsifying agents .. ..	67
<b>Bacteriostatic finishing, durable, of textiles</b>	402
<b>Barium sulphate reflectance standards</b> .. ..	172
<b>Basacryl, Celliton, Palanil, and Acryl dyes on</b>	
<b>Clevyl T (BASF)</b> .. .. .	94
<b>Basic dyes (see also Cationic dyes)</b>	
for acrylic fibres .. .. .	69, 197, 198, 318, 393
anthraquinone, for acrylic fibres .. ..	26, 100
— for hair .. .. .	26
— for keratinic fibres .. .. .	290
and application to leather colouring ..	102
azo, for acrylic fibres .. .. .	70, 194, 354
chemical structure (C) .. .. .	150
concentrated solutions and use .. ..	241
on cotton (BASF) .. .. .	95
and disperse dyes, disazo .. .. .	195, 288
— monoazo .. .. .	393
dispersions .. .. .	241
for hair .. .. .	359
heterocyclic, for acrylic fibres .. ..	292
methine, for acrylic fibres .. .. .	134, 356, 394
monoazo, for acrylic fibres .. .. .	24, 69, 98, 194, 195, 318, 392
— benzthiazole, for hair .. .. .	69
— indazole, for acrylic fibres .. ..	355
— pyrazolone .. .. .	132

## Basic dyes—continued

oxazine .. .. .	290
stable solutions .. .. .	359
steric and electronic effects in: electronic	
absorption spectra of derivatives of Mala-	
chite Green containing electron-withdrawing	
substituents in phenyl ring (C) .. ..	187
sulphonate-containing polyesters substantive	
to .. .. .	136
tests for evaluation of dyeing properties on	
acrylic fibres (BDC) .. .. .	60
thiocyanates of aminotriarylmethane, for inks	
triphenylmethane .. .. .	356
— for acrylic fibres .. .. .	394
xanthene .. .. .	356
<b>Batching devices in textile industry</b> .. ..	352
oil .. .. .	23
web-, apparatus .. .. .	20
<b>Beam (see also Dyeing machines)</b>	
machines, air-injection HT, dyeing warp-	
knitted fabrics on .. .. .	203
winches and jet-dyeing machines, high-	
temperature, in knitting industry .. ..	284
<b>Beneficiation of titaniferous ore</b> .. .. .	398
<b>Benninger-Peter CGF pad</b> .. .. .	315
<b>Benimidazole (see also Disperse dyes)</b>	
-carbocyanine and oxacarbocyanine dyes,	
solubilised .. .. .	165
coupling agents for oxidation bases .. ..	293
and trimethinecyanine dyes and intermediates	
therefor .. .. .	289
<b>Benzoates, metallic, stabilising polychloroethyl-</b>	
<b>ene with</b> .. .. .	390
<b>Benzofulvenes, 3-substituted, reactive dyes from</b>	
<b>1,3-indandione</b> .. .. .	239
<b>Benzoindolinispiropyran, light-sensitive com-</b>	
<b>plexes, and halides of group IIB metals</b> ..	298
<b>Benzolans, hydroxy-, as stabilisers for polyolefins</b>	316
<b>Benzophenone in alcohols, photoreductions with</b>	
<b>(C)</b> .. .. .	345
use as sensitizer .. .. .	354
<b>p-Benzquinone, photo-oxidation with light im-</b>	
<b>pulse excitation of thiazine dyes by</b> .. ..	67
<b>Benzoylacetamide colour couplers, yellow-</b>	
<b>forming</b> .. .. .	359
<b>Benztiazole derivatives, relation between affinity</b>	
<b>for cellulose and protection against micro-</b>	
<b>bial degradation</b> .. .. .	193
-3N-oxides, 2-amino-, substituted, monoazo	
dyes derived from, dyeing properties on	
various synthetic-polymer fibres (C) .. ..	309
<b>Benztiazole monazo disperse dyes</b> .. ..	132
<b>Benztiazole, 2-phenyl-, substituted, fluorescent</b>	
<b>brighteners</b> .. .. .	242
<b>Benzy alcohol, dyeing wool in presence</b>	246
<b>Benzyldene, oxonol, hemioxonol and cinnamyl-</b>	
<b>dene dyes</b> .. .. .	165
<b>Beverages and foods, colorant for</b> .. ..	291
<b>Bicyclononanedione, metal chelates, as algicides</b>	130
<b>Binders, influence of mechanical properties on</b>	
<b>textile behaviour of non-woven materials</b> ..	74
inorganic, water-repellent agent for coating	
on moulding compositions containing .. ..	285
for lacquers, air-drying water-dilutable syn-	
thetic resins .. .. .	244
for paint for electrodeposition and methods	
and apparatus for applying such paint ..	294
paint, electron-curable .. .. .	244
— radiation-curable, unsaturated poly-	
siloxanes as .. .. .	398
— containing vinyl monomers and hydroxy-	
lated polymer reacted with polyisocyanate	
and hydroxyalkyl acrylate .. .. .	294
— water-thinnable .. .. .	244
for pigment-printing pastes .. .. .	67
for pigments and fillers, aqueous dispersions	
of synthetic resins resistant to saponification	
polymeric, containing vinyl esters of branched	
carboxylic acids for use in electrodeposition	
finishes .. .. .	398
polyurethane, used in electrostatic flock	
printing, optimum drying conditions .. ..	325
for radiation-curable paints .. .. .	244

## Binders—continued

surface coatings based on dispersion of copolymer containing etherified <i>N</i> -methylolamide groups as ..	359
thermoplastic, for continuously produced leads for pencils, copying pencils and coloured pencils ..	325
water-dispersible, methylolamide products ..	23
Binding pigments to glass-fibre fabric ..	294
Biochemical oxygen demand for industrial effluents ..	237
Biocides, bromoacetanilides as ..	353
Biological treatment of textile finishing wastes ..	390
2,6-Bisoxazolinophthalenes, fluorescence ..	286
Bisphenols as high-opacity diazotype couplers ..	239
Bleach and detergent compositions, mono- and di-phthalimido derivatives as fluorescent brighteners for use in ..	99
Bleachable dyes ..	242
Bleaching agents, <i>N</i> -halogenoalkanesulphonamides ..	353
— new, and preparations, use in bleaching ..	322
— peroxy, activators for ..	390
— protecting nylon against ..	246
cellulosic pulp with gaseous chlorine monoxide ..	399
cellulose-synthetic-polymer blends ..	200
cellulose textiles ..	167
clay or other minerals with dithionite ..	295
composition, oxidation ..	322
continuous, measurement and control problems in ..	207
cotton threads, stabilisation of peroxide solutions by organosilicon compounds in ..	245
dye, reversible for use with giant pulse laser ..	25
dyeing, printing and finishing plants, complete, establishment (Sy) ..	422
or dyeing, retarding damage to hair during ..	31
effects in home laundering ..	101
fabric, portions of which are dyed with sensitive dye ..	322, 399
flax: influence of retting ..	29
high-temperature, continuous, of cotton fabrics, stability of hydrogen peroxide during ..	322
jute ..	29
kier boiling and acid treatment, changes in cotton cellulose during ..	322
liquor, retention of brightness of bleached wood pulp by incorporating thiourea in ..	246
one-step, of wood pulp with peroxide and pyrophosphate ..	246
-out process, photographic, azoaniline and azomethine dyes for ..	318
with peracetic acid formed <i>in situ</i> ..	399
peroxide, of wool in solvent medium ..	201
photo-, of wool regardless of yellowness caused ..	245
polyester-cotton fabrics by pad-roll process ..	295
polyester fibres with peracetic acid ..	360
and preparation of textiles from non-polar solutions ..	72
pulp, use of trivalent ions in ..	30
rapid, of wool with extremely intense light ..	322
and scouring, simultaneous, of cloth, parts of which are dyed with sensitive dye ..	322
with sodium chlorite, odour control in sulphate pulp ..	200
water consumption in (P) ..	140
wood pulp with fluorine, hydrofluoric acid and oxygen difluoride ..	322
and yellowing of wool, by light ..	295
— by ultraviolet radiation ..	295
Bleachworks, quality control in ..	72
Boiler-scale composition ..	130
scale, controlling formation ..	66, 163
Boiling processes, alkaline, for cellulosic fibres ..	200
Bonded and coloured fabrics ..	251
fabrics (see Dyeing, Non-woven) ..	
-fibre fabric of improved opacity ..	404
and laminated apparel fabrics, test methods and quality-control programmes for ..	171
Bonding, electromagnetic, of thermoplastic printing ..	74

## Bonding—continued

and flocking with aqueous acrylic adhesives, rheology factors in ..	249
and laminating polyurethane foam to textiles ..	33
organic coatings to hard solids ..	321
Boron-containing polyquaternary ammonium reducing agents ..	285
Breaking properties of rayons, effect of gamma radiation on ..	245
Brightening kaolin ..	27
water-soluble cellulose derivatives ..	72
Brightness and lightness on different backgrounds, calculation ..	172
methods of determination ..	28
and whiteness of kaolin, improving ..	135
Bromoacetanilides as biocides ..	353
Brush-coated fabrics ..	206
Burning characteristics of cotton, polyester and nylon fabrics as function of pre-ignition temperature ..	248
and flammability characteristics of textiles, testing ..	207
Butadiene-acrylic-styrene copolymers, enhancing resistance to discoloration by heat ..	34
polymer and drying or semidrying oil, coating materials prepared from ..	359
Butadienyl dyes ..	241
Butyl rubber (see Masterbatching)	

## C

Cadmium yellow and cadmium red in mass coloration of polypropylene fibres ..	203
Calcium carbonate, paper-coating composition containing ..	327
— titanium dioxide pigment, composite ..	398
hydrogen phosphate dihydrate and calcium sulphate dihydrate, coprecipitated, as coating pigment for paper ..	390
sulphoselenide ..	397
Calenders for use in transfer printing (Sy) ..	489
versatility in textile finishing ..	325
Calsolene Oil HS: uses in dyeing cellulosic materials (ICI) ..	282
$\epsilon$ -Caprolactam, monoazo dyes from ..	392
Capsules (see Dyeing)	
Carbamates, removal of free formaldehyde from fabrics sensitised with ..	248
Carbazole-anthrimides ..	71
nucleus, carbocyanine dyes containing ..	391
Carbocyanine dyes (see also Cyanine dyes) containing carbazole nucleus ..	319
merocyanine and styryl dyes, intermediates for ..	241
mixtures as supersensitisers ..	247
and monomethinecyanine dyes ..	165
with nitro-substituted 3H-indole nucleus: use in photographic emulsions ..	291
oxa-, unsymmetrical <i>meso</i> ..	318
<i>meso</i> -alkylthio ..	26
Carbon black (see also Channel black, Furnace black, Masterbatching, Pelletising) ..	71, 166
apparatus for producing ..	130, 315, 353
adsorption of ionic surfactants on ..	67
effect on properties of mass-coloured poly(vinyl chloride) fibres ..	400
of enhanced structure, furnace-burner combination for producing ..	315
feeding to pelletiser using gas pulses in flow control zone ..	162
furnaces, controlling ..	20
— employing insertable rods of catalytic refractory ..	162
halogenated, for paints ..	397
high-colour-density, pressure-sensitive transfer material capable of being pigmented with ..	297
increasing yield ..	320
manufacture, vortex reactor for ..	191
oxidative treatment ..	321
ozonisation ..	166
pellets ..	135

## Carbon black—continued

production in nonoxidising or inert atmosphere ..	243
with reduced structure ..	321
rotating atomiser for injecting liquid hydrocarbon feedstock into furnace to obtain increased yield and rate of production ..	352
-silica pigment ..	243
sulphonated ..	397
— of improved properties ..	397
surfaces, characterisation ..	359
thermal ..	135
— process giving increased throughput, yield and improved quality ..	359
treated with oxidising mineral acids, eliminating free acid from ..	293, 397
for use in printing inks, production ..	239
various grades, vertical furnace having improved flexibility of operation for production ..	191, 237
Carbon, activated, treating textile wastes with ..	21
Carbonising (Carr) ..	350
acidification, and neutralising of wool, study of chemical changes in ..	295
liquors, study ..	101
position in processing (C) ..	113
practical (C) ..	113
woollen fabric: literature review (C) ..	111
— practical work (C) ..	114
Carboxamido-aziridine water-repellent agents ..	163
Carboxylic acid, modification of cellulose by, urea-hexahalogenoacetone adducts as catalysts for ..	33
Cardigans (see Dyeing and finishing)	
Care-labelling of textiles ..	208
— role of dyer and finisher in ..	172
$\beta$ -Carotene ..	71, 166
4,4'-diketo-, solutions for colouring processed cheese ..	396
increasing, yields in <i>Blakeslea trispora</i> fermentation ..	359
Carotenoid food dyes ..	166
Carpenter A W (Obituary Notice) ..	351
Carpets (see also Coating, Coloration, Dyeing, Finishing, Flame resisting, Impregnating, Printing, Weathering) ..	
backing, flame-retardant ..	204
colour fastness to rubbing, draft test procedure for determination (FTCC) ..	155
-flammability test procedure, development ..	328
yarn dyehouse, decolorisation of effluent from ..	353
Carriers (see also Dyeing) (P) ..	177
for acrylic fibres ..	163
effect on light fastness (P) ..	180
for fibre blends (P) ..	179
for printing with disperse dyes on synthetic-polymer and triacetate textiles, salicylanilide as ..	297
residues, removal from dyed polyester materials ..	203
Cationic dyes (see also Fixation) ..	
bright vivid dyeings on cellulose esters with ..	324
4-quinazoline, for acrylic fibres ..	97
Celliton, Palanil, Basacryl and Acryl dyes on Clevyl T (BASF) ..	94
and Palanil dyes on triacetate (BASF) ..	19
Cellulose (see also Abrasion resistance, Bleaching, Brightening, Crosslinking, Dyeing, Esterification, Etherifying, Finishing, Printing, Size, Smooth-drying, Yellowing) ..	
acetobutyrate as levelling agents, low-viscosity, polyurethane lacquers containing anionic, dye-binding properties, and mechanism of ion binding in solid state (C) ..	81
and aqueous solutions of amic acids, pad-bake reaction ..	325
carboxymethyl-, action of sodium hypochlorite on ..	316
chemical modification with $\beta$ -oxyethyl sulphones ..	206
creation of reactive centres on, using hexahydro-1,3,5-triaxylol-s-triazine ..	326
derivative, water-soluble, basic-dyeable, heat-stable ..	399

PAGE

Cellulose—continued

243

NN-diethylaziridinium chloride as coreactant catalyst for reactions of N-methylol compounds with .. .. .

402

321

dye with reactive dyes, hydrolysis .. .. .

296

352

fibre-aqueous electrolyte solution systems, zeta-potential studies in (C) .. .. .

338

243

formaldehyde-modified, degradation study .. .. .

75

397

graft polymerisation with suppression of homopolymer formation .. .. .

206

397

lacquers and printing inks .. .. .

294

359

measurement of specific surface of colorants in modification by carboxylic acid, hexahalo-genacetone-urea adducts as catalysts for .. .. .

33

359

modifying, with epichlorohydrin vapour in two steps .. .. .

206

293

pad-bake reaction with aqueous solutions of anhydride ammonia .. .. .

326

191

poly(vinyl alcohol) and starch bound by treatment with  $\beta$ -oxyethyl sulphones .. .. .

206

21

reacting with sultones .. .. .

206

350

regenerated, delustred or coloured .. .. .

399

295

— fibres, physical properties and dyeing behaviour .. .. .

102

101

— transparent, coloured .. .. .

295

113

studies in accelerated oxidation of: hypochlorite oxidation of cellulose in presence of manganous hydroxide (C) .. .. .

228

113

thermodynamics of sorption of three direct-dye mixtures on .. .. .

72

163

— wool blends, modifying both components in .. .. .

363

33

**Cellulose ester** (see also Dyeing or printing)

208

bright vivid dyeings on, with cationic dyes containing flame retardants .. .. .

360

172

flame-resistant .. .. .

295

71

polyolefins and poly(vinyl chloride), ultraviolet absorbers for .. .. .

391

396

**Cellulose ethers**, quaternary .. .. .

23

359

**Cellulose triacetate** and polyesters, application of azoic dyes to .. .. .

73

166

**Cellulosic** (see also Bleaching, Crosslinking, Desizing, Dyeing, Finishing, Smoothing, Softening, Stretch finish)

351

fabrics, crosslinked, improving tensile strength — reaction to air contaminated with sulphur dioxide .. .. .

363

204

fibres, alkaline boiling processes for .. .. .

200

155

— fine structure .. .. .

167

328

ligno-, materials, treating to produce stable colour .. .. .

201

353

materials, chemical modification .. .. .

170, 250, 327

180

— rendering amenable to moulding .. .. .

299

179

and synthetic-polymer textiles, imparting improved strength to .. .. .

299

297

— metallising .. .. .

136

203

textiles, abrasion-resistant, durably pressed .. .. .

403

324

— bis(sulphatomethyl)phosphonic acid for treating .. .. .

163

97

— crosslinked, improving resistance to acid or alkaline hydrolysis .. .. .

249

94

— delayed-cure process for .. .. .

299

19

— light-resistant .. .. .

245

328

— wet recovery, increasing .. .. .

206

321

**Cement-asbestos products**, integrally coloured .. .. .

328

325

**Centrifuge**, disc, determination of particle size of pigments by use .. .. .

207

81

**Ceramic colour standards** .. .. .

364

325

— based on silica and zirconia .. .. .

293

316

— based on zirconium and iron .. .. .

397

206

— pink .. .. .

293

126

transfers as bases for gold, silver or platinum decorations .. .. .

362

309

**Chalk whitening** .. .. .

27

316

— natural .. .. .

135

206

**Chalking** of latex paints, influence of wave-length of radiation and temperature on .. .. .

294

126

**Channel black**, modified furnace black as substitute for .. .. .

359

309

**Cheese** (see Colouring)

309

Chelating agents, condensates of aldehydes and triazine derivatives as .. .. .

238

PAGE

China clay, English, treating Georgia kaolin to obtain product equal in measured whiteness to .. .. .

397

22

**Chlorination** of effluents .. .. .

169

169

of chemically treated wool .. .. .

169

397

**Chlorine** (see Bleaching)

397

**Chlorine dioxide** (see Bleaching)

397

**Chlorine monoxide** (see Bleaching)

353

**Chlorites**, alkali-metal, stable aqueous mixtures containing .. .. .

353

347

**o-Chlorobenzoic acid** and glucose in water, photoreductions with .. .. .

347

294

**Chromate pigments**, active, chemical, physical, and thermal behaviour in primers .. .. .

294

300

**Chromaticity diagram**, geodesic .. .. .

300

404

**Chromatography**, gas, characterisation of glycol ethers by .. .. .

404

207

gas-liquid, application to analysis of anthra-quinone and intermediates .. .. .

207

208

liquid-liquid, apparatus for .. .. .

208

207

paper, identification of dyes by .. .. .

207

208

thin-layer, apparatus for .. .. .

208

328

— gel, and ion-exchange chromatography, apparatus for carrying out .. .. .

328

194

**Chrome dyes**, colour and complex formation .. .. .

194

293

**Chromium-iron oxide pigment**, black .. .. .

293

292

**Chromogen-bonded and coupler polymers** .. .. .

292

165

**Cinnamylidene**, oxonol, hemioxonol and benzylidene dyes .. .. .

165

317

**Cinnoline**, studies on dyes derived from .. .. .

317

237, 285, 390

**Clarification** of effluents .. .. .

237, 285, 390

191

of suspensions in liquid, apparatus for .. .. .

191

398

**Clays**, improved, for use as pigments, as fillers or in prime or top coatings for paper .. .. .

398

24

**Clothing**, high-visibility, colours for .. .. .

24

364, 404

measurements of functional characteristics .. .. .

364, 404

34

**Coated fabrics** (see also Finishing, Colouring)

34

— vapour-permeable .. .. .

34

250

**Coating** (see also Coating compositions, Drying)

284

adhesion, water repellency and mechanical properties, improved nylon and polyester fabrics having .. .. .

284

167

apparatus, multiple-doctor .. .. .

167

244

colour-, of nutshells .. .. .

244

66

coloured, multiple-layer, by use of actinic irradiation .. .. .

66

297

continuous, of pieces of fabric .. .. .

297

390

differential-speed, gravure .. .. .

390

101

dip or bead, method and apparatus for electrodeposition, aqueous bath for .. .. .

101

294

electrostatic, dry, primer for .. .. .

294

21

extrusion .. .. .

21

252

— with olefinic copolymer .. .. .

252

327

glass-fibre fabric .. .. .

327

293

with hydrous metal oxide, improving tinting strength and hiding power of titanium dioxide by .. .. .

293

33

and impregnating agents, crosslinkable .. .. .

33

364

and impregnating carpets to improve wearing, pilling and fuzzing properties, nylon composition for .. .. .

364

66

and laminating fabrics, equipment for .. .. .

66

167

multilayer .. .. .

167

21

multiple-, apparatus .. .. .

21

353

paper, and fibrous materials, organopoly-siloxane compositions for .. .. .

353

27

— pigments for .. .. .

27

390

pigment for paper, coprecipitated calcium hydrogen phosphate dihydrate and calcium sulphate dihydrate as .. .. .

390

398

powder, titanium dioxide pigmenting of polymers intended for .. .. .

398

389

and printing, web-, method and apparatus .. .. .

389

76

processes .. .. .

76

359

spray-, of particulate particles .. .. .

359

75

textile, constitution and properties of poly-urethanes for .. .. .

75

362

— isocyanates and polyurethane resins for .. .. .

362

33

— one- and two-component polyurethane systems in .. .. .

33

359

titanium dioxide with hydrous metal oxides .. .. .

359

162, 284

travelling webs .. .. .

162, 284

162

— apparatus for .. .. .

162

PAGE

Coatings (see also Printing)

321

aerosol metallic, having improved resistance to delinting .. .. .

321

294

alkali-resistant .. .. .

294

328

apparatus for measuring, by means of radiation .. .. .

328

359

based on reaction products of polyisocyanates and copolymers containing hydroxyl groups .. .. .

359

167

black oxide, on coarse iron castings .. .. .

167

398

coloured .. .. .

398

294

corrosion-resistant, surface, chromiferous organic component for .. .. .

294

135

decorative, for hardboard .. .. .

135

321

electrodepositable, having outstanding fastness to detergents .. .. .

321

199

fluorescent .. .. .

199

253

high-durability, comparison of accelerated and conventional exposure trials on .. .. .

253

244

light-resistant .. .. .

244

76

— matt, for paper .. .. .

76

398

for metallic, ceramic or organic substrates, alkali-metal silicates as .. .. .

398

294

moisture-resistant, hard, nitrocellulose lacquers yielding .. .. .

294

321

organic, bonding to hard solids .. .. .

321

286

paper, diazonium salts of esters of starch and anthranilic acid or derivatives used as .. .. .

286

28

pigmented, acrylate and fluorocarbon topcoat, substrates coated with .. .. .

28

135

— heat-resistant .. .. .

135

252

— for paper .. .. .

252

294

polycarbonate-aminoplast, of high elasticity, impact strength and hardness .. .. .

294

359

prepared from drying or semi-drying oil and butadiene polymer .. .. .

359

244

protective, for ferrous surfaces .. .. .

244

170

scratch-resistant, for plastics .. .. .

170

244

substrates coated with, polymeric ultraviolet-radiation barrier .. .. .

244

359

surface, based on dispersion of copolymer containing etherified N-methylolamide groups as binder .. .. .

359

28

— titania-pigmented vinyl chloride-vinyl acetate copolymer, reactivity .. .. .

28

398

— titanium dioxide as component .. .. .

398

359

surfactant, for iron blue to improve storage stability .. .. .

359

244

temporary, for insides of paint-spray booths .. .. .

244

294

thermosetting acrylic copolymer, having good weathering properties .. .. .

294

325

transfer, for pressure-sensitive copying paper ultraviolet-resistant .. .. .

325

167

white or coloured, review of methods for producing, without use of pigments .. .. .

167

398

wrinkle, compositions forming .. .. .

398

398

zinc, coloured by formation of oxide films having light-interference effects .. .. .

398

135

**Coating compositions** .. .. .

135

321

acrylic resin, self-crosslinking .. .. .

321

244

air- or moisture-drying, vinyl .. .. .

244

321

alkyd-resin flexographic .. .. .

321

328

amount on web, apparatus using radiation to measure moisture or filler content .. .. .

328

28

aqueous, for electrodeposition .. .. .

28

244

based on copolymers containing acetoacetate groups .. .. .

244

294

coloured, weather-resistant, aluminium-bituminous .. .. .

294

294

containing polysilicic acid .. .. .

294

294

containing pyridine salts of aromatic sulphonic acids .. .. .

294

321

conversion, phosphate-containing, and application to ferrous metal surfaces by reverse roller coating .. .. .

321

75

crosslinkable, and application .. .. .

75

169

dry-working black-image .. .. .

169

244

for electrophoretic deposition .. .. .

244

76

emulsion, for paper .. .. .

76

244

epoxy-resin .. .. .

244

131

for fabrics .. .. .

131

285

for floccs .. .. .

285

398

heat-curable .. .. .

398

321

of improved resistance to water-spotting and to crazing by solvents .. .. .

321



	PAGE		PAGE		PAGE
<b>Coating compositions—continued</b>		<b>Colour—continued</b>		<b>Colour couplers—continued</b>	
ink-transfer .. .. .	167	—control, problem, instruments solve ..	254	photographic, amides as .. .. .	320
modified amide-interpolymer, yielding coat-		defectives: basic facts on what they see ..	300	soluble in high-boiling organic solvents ..	359
ings of outstanding resistance to detergents	244	development, accelerating, during curing of		substituted hydroxynaphthamides as ..	242
and moulding compositions, polyester, curable		minced meat and maintaining colour during		yellow-forming .. .. .	24
by ultraviolet radiation .. .. .	252	storage and display .. .. .	254	—benzoylacetamide .. .. .	359
one-package, cold-setting .. .. .	244	deviations of dyeings and colourings,		yielding dyes of greater optical clarity,	
paper- .. .. .	136	measuring and maintaining within		benzoylacetanilide derivatives .. .. .	359
—containing calcium carbonate .. .. .	327	prescribed tolerances .. .. .	300	<b>Colour former for pressure-sensitive recording</b>	
—containing satin white .. .. .	251	difference ( <i>see also</i> Munsell)		paper .. .. .	131
polyaldehyde-polyamine .. .. .	294	—acceptability: pastels <i>versus</i> deep tones ..	300	yielding dyes in presence of free radicals ..	397
polyepoxide, rapid-curing fluidisable ..	321	—assessment by visual means and by colour-		<b>Colour photographs and colour couplers ..</b>	32
polyester-based, having excellent resistance to		difference formulae, correlation between ..	364	improving light fastness .. .. .	74
'metal marking' when applied to metals	244	—calculated, small, practical interpretation ..	253	<b>Colour photography, developer for ..</b>	32
polymeric, for repairing damaged lacquer		—DIN, comprehensive comparison with that		<b>Combustion rates of fabrics, measurement ..</b>	328
coatings .. .. .	359	given by seven other formulae .. .. .	300	<b>Commission Internationale de L'Eclairage</b>	
polyvinyl .. .. .	28	—formulae, as applied to saturated colours		system, 1931, origins .. .. .	253
powdered plastic, for metals, ceramics, glass,		differing in lightness and saturation,		<b>Computer, applications for process control ..</b>	300
plastics and wood .. .. .	294	experimental study .. .. .	299	dyeing, quality control in .. .. .	36
for recording material .. .. .	298	—construction, and comparisons by		—and spectroscopy .. .. .	102
solvent- and alkali-resistant, based on polyiso-		psychological judgments .. .. .	300	on-line, in dyehouse, for control and auto-	
cyanates and hydroxylic copolymers ..	244	—derived from opponent colour systems ..	404	mation (Sy) .. .. .	426
thermosetting polyester .. .. .	244	—different, comparison .. .. .	299, 364	for rationalisation and automation ..	364
weather-resistant, for metal substrates ..	294	—FMC, clarification concerning usage ..	300	simulation of dyehouse processes (AC) ..	54
<b>Colorants, atomisation .. .. .</b>	244	—for industrial use: measurement and assess-		<b>Condensation, prevention in closed dyeing</b>	
in cellulose, measurement of specific surface		ment of reproducibility and repeatability of		apparatus .. .. .	130
and fillers, finely divided, granulation ..	359	colour-difference measurements (CMC) ..	379	<b>Condense dye, phthalocyanine, sulphur ..</b>	71
food .. .. .	291, 320	—measurement .. .. .	35	<b>Consumer and textile industry .. .. .</b>	328
and fungicides, metal oxide acylates useful as		—predicted and measured, comparison (Sy)		<b>Control, automatic, batch .. .. .</b>	172
ink containing lignin-based .. .. .	244	dispersions, relative, determination by method		—in dyeworks .. .. .	172
organic, quantitative measurement of photo-		based on use of controlled energy mill ..	244	and automation, computer, on-line in dye-	
chemical degradation .. .. .	404	-forming agent for electrographic recording ..	359	house (Sy) .. .. .	426
and resin, spherical xerographic toner particles		in glass .. .. .	172	direct digital, of batchwise dyeing processes ..	172
containing .. .. .	359	for high-visibility clothing .. .. .	24	of finished product (Sy) .. .. .	407
salt grinding to pigment grade .. .. .	359	-match classification by variable parameters		and handling of tubular-knitted fabrics ..	352
sighting .. .. .	242	matchers, textile, precision in relation to		laboratory, in dyeing and finishing ..	253
and ultraviolet inhibitors in plastics ..	397	measurement of colour differences .. .. .	299	process, applications of computers for ..	300
<b>Coloration of animal fibres, disulphide exchange</b>		-matching, data, and psychophysical spectral-		—and automation in textile finishing industry,	
as method (C) .. .. .	116	sensitivity measurements .. .. .	35	economic significance .. .. .	254
of anodised aluminium .. .. .	168	—instrumental .. .. .	253	programmed, of batchwise finishing processes	
—by electrolytic deposition .. .. .	254	—in package dyeing, analysis of factors		punch-card, of dyeing .. .. .	172
of beads of polystyrene or styrene-acrylonitrile		influencing (Sy) .. .. .	432	<b>Copolymer (see also Finishing)</b>	
copolymers .. .. .	170	—by 14 normal observers, geodesic chroma-		photochromic Schiff-base .. .. .	320
of carpet, continuous .. .. .	360	ticity diagram based on variance .. .. .	208, 253	<b>Copper rollers, printing stripes by ..</b>	204
continuous, of paper (Sy) .. .. .	485	—system incorporating colour analyser ..	36	<b>Copying, cyanine and hemicyanine dyes for use</b>	
of fibrous materials and polymeric films with		-measurement, instrument, new, Momcolor		with radiation-activatable titanium dioxide	
polymerisable dyes .. .. .	324	—practical, procedures for .. .. .	364	system, light-sensitive, heat-erasable ..	248
and finishing composition for leather and		mixing, matching and maintaining (graveure		<b>Copysheets .. .. .</b>	247
coated fabrics .. .. .	34	inks) .. .. .	74	bis(triphenylphosphine)borohydridocopper(I)	
of glass with water-soluble compounds ..	36	monitor, Shirley (Sy) .. .. .	451	for .. .. .	320
of human hair with semi-durable dyes ..	323	-reactant material for use in transfer copy-		heat- or pressure-sensitive, sodium cupric	
of leather, application of basic dyes in		sheets .. .. .	196	pyrophosphate in .. .. .	325
of naturally occurring porous stone ..	168	space, Kubelka-Munk, calculation of dyeing		light-sensitive, comprising leucophthaloc-	
of plastics, pigment compositions for ..	99, 170	recipes using vector equations in .. .. .	364	yanine and photocatalytic material ..	247
of processed cheese, solutions of 4,4'-diketo- $\beta$ -		spacing, perceptual, exploratory investigation		—heat-developable, for producing colour	
carotene for .. .. .	396	-specification system .. .. .	172	images .. .. .	401
random, Tak machine for .. .. .	162	stability, of di-isocyanate-modified polyester-		pressure-sensitive, colour formers for ..	166
surface, of paper and non-woven fabrics (ICI)		amides from linseed and soybean oils ..	27	—fluoran compounds for use in .. .. .	24
of tufted carpets .. .. .	362	—of films from conventional and emulsion		—transfer coating for .. .. .	325
<b>Colorcord colorimeters, precision of measure-</b>		paints containing linseed oil: effects of		thermographic copy using lignin reaction in	
ments with (CMC) .. .. .	379	methyl azelaaldehyde .. .. .	300	transfer, colour-reactant material for use in	
<b>Color-Eye (Kollmorgen) .. .. .</b>	283	standards, ceramic .. .. .	364	<b>Cordela: new non-flammable fibre ..</b>	321
colorimeters, precision of measurements with		television, principles (EP) .. .. .	48	<b>Corrosive action on metals of diazonium salt</b>	
(CMC) .. .. .	379	of textiles, new instruments and techniques for		solutions, reducing .. .. .	321
<b>Colorimeter, digital, Shirley (Sy) ..</b>	451	assessment of variations in (Sy) .. .. .	451	<b>Cosmetics (see also Stabilising)</b>	
fibre optic, and application .. .. .	254	-theory, opponent, treatment of CIE diagram		bromacid dye salts for .. .. .	27
—photoelectric .. .. .	36	tolerances, discussion .. .. .	300	<b>Cost reduction: power and planned maintenance</b>	
<b>Colorimetric determination of iron in liquids ..</b>	208	transmission (EP) .. .. .	51	<b>Cotton (see also Antisoil, Bleaching, Crease</b>	
tristimulus-, specifications, applicable in		in vinyls, calculating, from scattering and		recovery, Crease resistance, Creasing,	
textile industry .. .. .	171	absorption coefficients .. .. .	299	Crosslinking, Curing, Cyanoethylation,	
<b>Colorimetry, abridged, for production quality</b>		yield of dye-liquors and printing pastes,		Degradation, Desizing, Drying, Durable-	
control .. .. .	300	increasing .. .. .	361	press, Dyeing, Dyeing and finishing, Dyeing	
differential, $\Delta E$ by, in production dyeing ..	299	<b>Colour couplers .. .. .</b>	97, 291	or printing, Finishing, Flame-retardant,	
in textile industry, possibilities in application		azo, pyrazolone .. .. .	68	Grafting, Laundering, Mercerisation, Nitra-	
of transparent materials .. .. .	299	and colour photographs .. .. .	32	tion, Parchmentising, Rot resistance,	
<b>Colormaster colorimeters, precision of measure-</b>		cyan .. .. .	24, 68, 97	Scouring, Setting, Soil-release, Smooth-	
ments with (CMC) .. .. .	379	—two-equivalent .. .. .	68	drying, Stain release, Water-repellent)	
<b>Colour analyser and sorting apparatus ..</b>	300	for heat-developable diazotype composition		absorption of formaldehyde in finishing treat-	
bases, universal, for lacquers and enamels ..	167	of high solubility in high-boiling organic		ments .. .. .	103
calculations, rapid, simple aids to .. .. .	253	solvents .. .. .	359	applications of infrared spectroscopy in in-	
-coated roofing granules .. .. .	135	magenta-coloured .. .. .	242	vestigations .. .. .	104
comparator, automatic pneumatic		—non-diffusing .. .. .	68	cellulose, changes in, during kier boiling,	
control (Sy) .. .. .	408	—pyrazolone .. .. .	97	bleaching and acid treatment .. .. .	322



## Cotton—continued

- cellulose, modified with tris(2-chloroethyl) phosphoramidate, exploratory characteristics .. 32
- chemical damage, estimation .. 207
- chemical modification, using organic solvents and cotton-polyester blends, electrostatic properties .. 249
- crosslinked, chemical structure .. 205
- relating crease recovery to structure of reagent residues in .. 103
- effect of pretreatments on photodegradation .. 245
- estimation of chemical damage to .. 328
- fabrics, built-in lubrication on .. 398
- polymerisation of acrylic compounds on .. 205
- resistance to hydrolysis of substituted s-triazine finishes .. 205
- treated with substituted s-triazines .. 199
- fibres, treated to impart differences in wet and dry crease recoveries: tensile, shear and recovery properties .. 249
- unmodified and mercerised, measurement of pore structure .. 75
- in yarn, effects of treatment with caustic soda on gross structure .. 75
- improving resiliency and/or resistance to wear or man-made fibres, treatment with soluble polymeric alcohol derivatives .. 136
- modification of surface characteristics by introduction of anionic groups and mechanism of ion binding .. 402
- polyester and nylon fabrics, burning characteristics, as function of pre-ignition temperature .. 248
- steam-curing of methylolamides on .. 248
- in textile economy of future .. 29
- textiles, mechanical changes of state in alkaline treatments: fundamental processes and significance of structural model of fibre .. 101
- treatment with liquid ammonia, fundamental basis .. 200
- physical aspects .. 200
- vinylation .. 403
- Coumarin** (see also Fluorescent brighteners)
- 7-cyano-, as ultraviolet absorbers .. 67
- 3,4-dichloro-, rotproofing agents .. 22
- phenyl-, novel approach to .. 239
- Coupler** and chromogen-bonded polymers
- magenta-forming, stabiliser for .. 397
- moiety, azoic, hydrazone compounds containing .. 196
- protected, cyan .. 319
- Coupling agents**, benzimidazole, for oxidation bases .. 293
- oil-soluble, for use in photographic layers .. 239
- for oxidation bases .. 293
- on keratinous fibres .. 358
- components, for azo disperse dyes .. 24
- azoic .. 239
- cyan .. 291
- for diazonium compounds in presence of water-soluble zinc salt, 2,3-dihydroxypyridine as .. 293
- and oxidation base, mixture, for hair dyeing .. 293
- resorcinol derivatives as .. 290
- for two-component diazotype materials .. 98
- properties and substantivity of Naphtol AS components .. 97
- Crease-recovery** and abrasion-resistant finishes .. 193
- of cotton fabrics and blended-fibre fabrics containing cotton, effect of moisture and temperature on .. 402
- finish, for cellulose-polyester blend and mixture fabrics .. 327
- durable .. 403
- and flame resistance of textiles, improving .. 206
- and flame-resistant finish .. 205
- properties, methylol compounds of acrylamide for imparting .. 163
- relating to structure of reagent residues in crosslinked cottons .. 103

## Crease-recovery—continued

- of textiles containing blend of polypivalolactone staple fibres with other fibres, improving .. 33
- wet-, of wool fabrics, measurement .. 328
- of wool fabrics, resin treatments to improve .. 402
- Crease resistance**, more rapid mild-cure finishing process for imparting to cotton .. 32
- Crease-resistant finish**, wet-, and dry- .. 75
- finishing of linen .. 32
- and water-repellent finish .. 205, 238
- Creasing**, prevention, during aqueous processing of tubular fabric (ICI) .. 283
- sensitivity of cotton fabrics to, during changing moisture regain, and dependence on setting and crosslinking parameters .. 363
- Crepe** or seersucker finish on fabrics of poly(vinyl alcohol) fibres, chemical embossing .. 206
- Crimplene**: production of woven fabrics (ICI) .. 283
- Croscolor** 650-L, SL, 414, M.2 and L (Joseph Crosfield) .. 281
- Croscour** AM and Jet (Joseph Crosfield) .. 281
- 11 and 12, Crosoft 603 and 603-D, Crosoft NTQ-10, Crosoft TAF-100, Crosoft 805, and Croscour OZ (Joseph Crosfield) .. 95
- Crosoft** softeners (Joseph Crosfield) .. 281
- Crosslinking agent**, grafting proteins on to wool using diepoxides as .. 75
- nitrogenous, chemistry .. 249
- polyfunctional, dye fixation with .. 246, 295
- cellulose .. 299
- with carboxylic acid catalysts .. 325
- with epichlorohydrin vapour .. 206
- soil-release properties of low-viscosity carboxymethylcellulose in .. 298
- core-, of cotton cellulose .. 32
- cotton .. 363
- with ethyleneurea derivatives having varying hydrogen-bonding capabilities: effects on physical properties and hydrogen-bonded structure .. 75
- with formaldehyde, changes in pore structure of fibre .. 103
- halogenalkyl phosphinic acids for low-temperature, wet, of rayon .. 404
- recovery from tensile strain in knitted cotton fabric after .. 326
- self-, in heated keratin .. 167
- and setting parameters, sensitivity of cotton fabrics to creasing during changing moisture regain and dependence on .. 363
- and simultaneously imparting stretch finish to cellulosic fabric .. 136
- spontaneously, copolymers as vehicles for stoving lacquers .. 398
- vapour-phase, of cotton and acrolein .. 362
- Crosslinks**, amide and ester, in wool .. 167
- Crystal Violet** in aliphatic alcohols, electric conductivity .. 164
- Cupreous** surfaces, patina finish for .. 294
- Curing** of minced meat and maintaining colour during storage and display, accelerating colour development during .. 254
- steam-, of methylolamides on cotton .. 248
- Cutting** samples from moving web, apparatus for .. 390
- Cyanamide**, reaction of wool with .. 402
- THPC resins, durable flame-retardant finish for cotton using .. 32
- Cyanine** compounds, influence of ligands on properties .. 391
- Cyanine dyes** .. 70, 165, 319, 357, 395
- carboyanine, merocyanine and styryl dyes, intermediates for .. 241
- combinations .. 165
- halogenated .. 319
- and hemicyanine dyes for use with radiation-activatable titanium dioxide for copying purposes .. 293
- and merocyanine dyes containing 1-alkyl-3-alkyl-7-alkyl-9-alkylxanthine nucleus .. 319
- and methine dyes .. 25
- strepto- .. 292

## Cyanine dyes—continued

- from 1,2-tetramethylenepyrroles .. 165
- tetranuclear .. 241
- trinuclear .. 134
- symmetrical .. 134
- with two conjugated chromophores .. 164
- Cyanoethylation** of cotton fabrics .. 75
- Cystine and cysteine**, treatment of dye with (C) .. 117
- Cytosine**, 5-amino-, and/or derivatives, for stabilising organic substances to oxidation and/or light .. 238
- D**
- Dacron** (see Finishing)
- Dampening** cloth before compressive shrinking .. 315
- Davis F V** (Obituary Notice) .. 233
- Daylight**, natural, international recommendations for calculation of .. 172
- Decatising apparatus** .. 191, 315
- economical, of woven and knitted fabrics .. 298
- or Sanforising, problems of minimising shrinkage by .. 191
- Decorations**, gold, silver or platinum, ceramic transfers as bases for .. 362
- Decorative patterns** by migration .. 204
- Degradation**, heat, of nylon (P) .. 39
- microbiological, of nylon-cotton blend fabrics .. 249
- photochemical, of keratins .. 101
- of nylon and polyurethane, reducing .. 171
- of organic colorants, quantitative measurement .. 404
- of polymers, role of hydrogen peroxide and singlet oxygen in (RP) .. 268
- study of formaldehyde-modified celluloses .. 75
- of textiles by daylight, reliability of artificial-light sources for predicting .. 252
- Delayed-cure process** for cellulosic textiles .. 299
- Delustring** nylon, dispersions of titanium dioxide for .. 67
- synthetic-polymer fibres, coated titanium dioxide for .. 243
- Desizing** (see also Size)
- cellulosic fibres and blends .. 200
- glass-fibre fabric .. 201
- water consumption in (P) .. 138
- Detergent** (see also Surfactant)
- bactericidal .. 238
- biodegradable, non-toxic .. 193
- and bleach compositions, mono- and diphtalimido derivatives as, fluorescent brighteners for use in .. 99
- diamine dioxide .. 390
- N,N-dimethyl-laurylamine oxide .. 353
- electrodepositable coatings having outstanding fastness to .. 321
- fluorescent brighteners for use in .. 99
- low-foaming, non-ionic .. 390
- modified amide-interpolymer coating compositions yielding coatings of outstanding resistance to .. 244
- non-biodegradable, removal from effluents .. 66
- solid, finely dispersing fluorescent brighteners succinic acid derivatives as .. 130
- surfactants and monomers for acrylic copolymers, 2-amido-2-alkenesulphonates .. 130
- for use in dry-cleaning solvents .. 238
- Developer** for colour photography .. 32
- composition, electrophotographic .. 298
- dye, anthraquinone .. 197
- diffusion-transfer systems, high-temperature processing in .. 247
- hydroquinone .. 239
- quinazoline .. 97
- substituted phthalocyanine, for use in multicolour diffusion-transfer processes .. 243
- electrophotographic .. 103
- liquid, for electrostatic images .. 32, 136, 247, 321
- oil-in-oil emulsion, for electrostatic images .. 247
- Developing** colourless dye images, reactant sheet for .. 325

	PAGE		PAGE		PAGE
<b>Dewatering</b> organic sludges by centrifugation ..	237	<b>Disperse dyes—continued</b>		<b>Dispersion—continued</b>	
sludge ..	22, 237	anthraquinone for Terylene ..	135	of iron- or nickel-containing pigments ..	135
— from effluents, apparatus for ..	284	— for thermofixation ..	197, 243	machinery ..	237
<b>Dextrin-modified latex-treated textile fabric,</b>		application to man-made fibres, dye auxili-		non-migrating, of vat dyes ..	166
dyeable ..	299	aries in (P) ..	173	of paint films containing titania, determination	
<b>Diamine</b> dioxide detergents ..	390	azo ..	24, 195, 240, 287, 288, 317, 318, 391, 392, 393	of gloss haze as function ..	253
Supra Blue GRL: Diamine Supra Blue RRL		— bis-indolizines and indolizin-azo-indoles ..	391	of pigments, and hard resins ..	244
(CFM) ..	281	— for cellulose acetate and nylon ..	68	— by salt-grinding ..	294
<b>Diazonium</b> compounds, for diazotype compo-		— coupling components for ..	24	of solids in liquids ..	101
sitions ..	98	— influence of water-soluble polymers,		<b>Dispersol</b> and Duralonol dyes, effect of Permalose	
— having improved thermal stability ..	165	dispersing agents, and wetting agents on		TG on fastness on polyester-cellulose	
— stable ..	24	stability ..	286	fabrics (ICI) ..	95
salts ..	356	— polymerisable ..	195	— for printing of synthetic-polymer fibres	
— <i>p</i> -chlorobenzene sulphonate, of morpho-		— in solution and on polymer film, fastness to		(ICI) ..	282
line-, piperidine-, piperazine- or thiomor-		light ..	323	VL (or VLX Flakes) (ICI) ..	161
pholine-substituted phenylamine compound		2,2'-(azodiarylene)bisbenzothiazole ..	290	<b>Dissolving</b> unit, automatic, Wira ..	284
for use in two-component diazotype		and azoic dyes for dyeing polyester fibres (ICI)	282	<b>Distempers</b> and emulsion paints, readily soluble	
compositions ..	362	and basic dyes, disazo ..	195	aluminium-carboxymethylcellulose for use	
— of esters of starch and anthranilic acid or		— monoazo ..	393	in ..	244
derivatives, used as paper coatings ..	286	bis-benzothiazolyazo ..	240	<b>Disulphide</b> dye, preparation (C) ..	117
— solutions, reducing corrosive action on		chemical structure and fastness to light ..	97	exchange as method of coloration of animal	
metals ..	321	dihydroxazobenzene for nylon ..	391	fibres (C) ..	116
<b>Diazotype</b> (see also Yellowing)		dioxazine ..	290	<b>Dithionite</b> (see also Bleaching, Sodium dithio-	
composition ..	297	disazo ..	25, 355	nate)	
— for aqueous development ..	169	— with vinylsulphonylethyltetrahydroquino-		substitution, BTRA process for ..	97
— diazonium compounds for ..	98	line group ..	25	<b>Douglas G T</b> (Obituary Notice) ..	190
— heat-developable ..	103, 169, 247, 298	dyeing behaviour, in PER (Sy) ..	509	<b>Drimafon</b> Z single-bath process ..	102
— colour couplers for ..	239	effect of crystal modification on dyeing		<b>Drimarene</b> R dyes: highly reactive dyes	
— negative ..	74	behaviour (P) ..	105	for continuous dyeing of cellulosic	
— two-component ..	401	fast to durable-press resin finishes ..	355	materials (S) ..	283
— for production of black-line images ..	247	fastness to sublimation ..	391	— highly reactive dyes for prints on cellulosic	
— two-component, containing xanthine		heat capacities (C) ..	304	fibres (S) ..	283
compound ..	136	heterocyclic ..	393	<b>Dry-cleaning</b> machine, scouring and milling	
— diazonium salts for use in ..	362	light fading behaviour ..	194	wool fabrics in ..	246
— yielding black images ..	325	light fastness in solution, determination by		shrinkage of textiles in: development of	
couplers, high-opacity, bisphenols as ..	239	spectrophotometric method, influence of		laboratory test to estimate shrinkage ..	29
materials ..	74	oxygen ..	207	solvents, detergents for use in ..	238
— diazophenylpiperazines for ..	131	and mass-coloration dyes, <i>N,N'</i> -disubstituted-		and washing fastness of dyed leather ..	76, 170
— two-component ..	325	diamino-2-chloroanthraquinone ..	71	<b>Dryer</b> , air-jet, brattice ..	66
— coupling components for ..	98	methine ..	196, 240	fabric, tensionless ..	162
<b>Diepoxides</b> as crosslinking agents, grafting		in mixtures, sublimation fastness ..	207	multi-cylinder, sizing machine with ..	283
proteins on to wool using ..	75	monoazo 25, 69, 132, 164, 195, 239, 240, 287, 317, 318,		radiation ..	284
<b>Diffuse</b> reflection spectra of filter papers dyed		354, 355, 391, 392		rapid package, Longclose (Platt Internat.) ..	95
with 1-aryazo-2-naphthols ..	286	— with benzisothiazolin-3-one-1,1-dioxide		<b>Drying</b> agents, surfactants and plasticisers	
<b>Diffusion</b> coefficients of azo dyes ..	239	groups ..	317	aqueous paint with increased period of	
into keratin fibres, effect of pH on Arrhenius		— benzothiazole ..	132, 239	conditions, optimum, of polyurethane binder	
activation energy for ..	102	— chemical constitution and light fastness ..	286	used in electrostatic flock printing ..	325
of non-ionic penetrants in nylon 6 ..	101	— and disazo ..	69, 355	cylinder ..	352
— transfer, dye-developer systems, high-		— for nylon ..	317	fabrics ..	21, 314, 389
temperature processing in ..	247	— for polyesters ..	240	— migration of vat dyes during ..	23
of water in polymer films: notions, funda-		— thiadiazole ..	164	— optimisation of ..	204
mental laws, and characteristics ..	252	— thiazolyl ..	317	and heat treatment with near-infrared	
<b>Dihydroquinones</b> , oxidising, to quinacridones ..	70	naphthylenebenzimidazole ..	25	radiation ..	325
<b>Diisocyanates</b> , blocked, treatment of nylon 6		naphthostyryl ..	394	hood, jet, web-edge baffle in ..	162
fibre by aqueous suspensions of ..	322	nitro ..	68	inorganic pigments ..	100
<b>Dimethine</b> dyes with 2-aromatically substituted		— diphenylamine ..	194, 391	latex-impregnated glass fibre ..	284
indole nucleus ..	196	— phenylamine ..	287	leather ..	252
<b>Dimethyl</b> sulphoxide, effect on chemical and		phenylazonioline ..	289	loose fibre ..	315
physical properties of wool ..	402	phenylazophenyl, mixtures ..	356	paper or paper-pulp, heat recovery in ..	96
<b>Dioxans</b> , epoxyalkyl-, as textile finishing agents ..	22	— for polyesters ..	196	paper webs ..	192
<b>Dioxazine</b> dyes (see Disperse dyes)		for polyester fibres ..	287	pelts fur side out, machine for ..	390
<b>Direct</b> dyes, anthraquinone ..	396	quinophthalone ..	99	printed or coated webs ..	352
azophthalocyanine ..	319	styryl ..	70, 240, 394	or semi-drying oil and butadiene polymer,	
influence of hydrophilic organic solvents on		sublimation out of dyed polymers: rate of		coating materials prepared from ..	359
particle size in solution ..	23	sublimation and amorphous transition of		sludge from effluents, apparatus for ..	284
mixtures, three, on cellulose, thermodynamics		polypropylene ..	102	spray, of titanium dioxide for use in emulsion	
of sorption ..	72	use of auxiliary products in application to		paints ..	398
place in dyehouse ..	201	man-made fibres (YDC) ..	19	or steaming textiles ..	284
solutions, %-potential of cellulose fibres in ..	321	<b>Dispersing</b> agents (P) ..	174	unit operations in ..	204
<b>Disazo</b> dyes (see also Azo dyes, Disperse dyes,		— lignin-derived, for disperse dyes ..	163	webs on sieve drums ..	192
Monoazo dyes, Polyazo dyes, Reactive dyes,		— polymers, and wetting agents, water-		yarn packages ..	192
Trisazo dyes) ..	134, 288	soluble, influence on stability of azo		<b>Dulling</b> , antislip and/or dry-soil-resistant	
cyan ..	240	disperse dyes ..	286	finish ..	33, 251
for silver-dye-bleach process ..	289	finely, of fluorescent brighteners in solid		<b>Durable</b> press, current perspective ..	326
<b>Disazo</b> pigments ..	69, 196, 318	detergents ..	163	effects in wool: effect of laundering con-	
for photoelectrophoretic imaging ..	196	and flocculating, quaternary ammonium salts		ditions ..	249
for printing inks ..	355	of lignin agents ..	22	— methods of stabilising set in ..	205
<b>Discoloration</b> of zinc oxide pigment, improving		<b>Dispersion</b> in aqueous media ..	244	— washing additives ..	298
by treatment with fluoride at 600–950 °C ..	243	disc-impeller, high-speed, theory ..	237	fabrics, 100% cotton, abrasive damage	
<b>Disperse</b> dyes (see also Dispersing agents,		flocculation and pigment volume concentra-		caused by washing and drying machines ..	363
Stripping)		tion, measuring undertone of tinted paint		— and garments ..	169
acylphenylaminoanthraquinone ..	243	and effect ..	244	— of improved soil-resist and soil-release	
anthraquinone ..	165, 197, 242, 356	influence of non-aqueous media on ..	243	properties ..	403
— and intermediates ..	395				

PAGE

Durable press—continued

fabrics, promoting cotton in ..	248
finish, for fabrics containing cellulose fibres ..	33, 403
— low-temperature, for cellulose textiles ..	403
— for nylon ..	250
finishing, humidity factor in ..	248
garments, deferred-cure, oil- and water-repellent agent for use on ..	193
knitted cotton fabrics, finishing additions for performance, improvements by pretreatment of cotton yarns with polymers ..	326
post-cure, fabrics, removal of free formaldehyde from ..	248
process, gaseous formaldehyde-sulphur dioxide ..	248
resins, disperse dyes fast to ..	355
— glyoxal-based, reaction mechanisms with cotton ..	326
review and outlook ..	248
and smooth-drying finish, for garments ..	169
— with improved abrasion resistance ..	22
treatments of cotton, role of fibre cohesion in and water-repellent finish ..	353
<b>Duranol</b> and <b>Dispersol</b> dyes, effect of <b>Permalose TG</b> on fastness on polyester-cellulose fabrics ( <i>ICI</i> ) ..	95
— for printing of synthetic-polymer fibres ( <i>ICI</i> ) ..	282
<b>Dyamul NF (YDC)</b> ..	162
<b>Dyapol WX (YDC)</b> ..	19
<b>Dye</b> (see also <b>Fixation</b> )	
absorption and fibre structure of polyester fibres, effect of setting on ..	360
addition in paper coloration ( <i>Sy</i> ) ..	485
aggregations or crystals in void spaces of viscose film ..	202
-bases and photosensitive compositions containing ..	70
-binding properties of anionic celluloses and mechanism of ion binding in solid state ( <i>C</i> ) ..	81
derivatives useful as inks ..	136
distribution in package dyeing, effect of rate of flow on ( <i>C</i> ) ..	12
granules ..	359
industry, U.S. ( <i>N</i> ) ..	93
-liquors, higher accuracy of metering, and complete or partial automation of additions to ..	208
— penetration, effect of density regularity of cross-wound packages on ..	324
— and printing pastes, increasing colour yield market, model based on acid dye consumption mixture, green-sensitising ..	291
molecules, effect of pressure on association in aqueous solution ..	354
penetration of fabrics at yarn intersections, microscope method of assessing ..	327
preparation in paper coloration ( <i>Sy</i> ) ..	485
-polymer bond, in phenothiazine type redox compounds, nature ..	286
receptivity of synthetic-polymer fibres, improving ..	245
-resist process for wool, sulphation as ..	101
solids, physico-thermal stabilities: heat capacities of disperse and vat dyes ( <i>C</i> ) ..	304
salts, bromacid, for cosmetics ..	27
— cyclammonium, concentrated solutions ..	134
solutions, ionised, surface tension ( <i>C</i> ) ..	301
— $\zeta$ -potentials of natural and synthetic-polymer fibres in direct dye solution and comparison of surface areas covered by adsorbed dye molecules with BET surface areas ..	321
testing, laboratory, and narrow-width production equipment ( <i>John Jeffries</i> ) ..	95
treatment with cystine and cysteine ( <i>C</i> ) ..	117
treatment with thioglycolic acid ( <i>C</i> ) ..	117
vessel, unloader for fabric rope being discharged from ..	352
<b>Dyes</b> (see also <b>Colour couplers</b> , <b>Fixation</b> , and <b>under specific dye classes</b> )	
adsorption on zinc oxide: effect of non-stoichiometry ..	97

Dyes—continued

aggregation: scope of application of maximum-slope method in studies ..	72
aromatic nitriles useful as ..	68
bleachable ..	242
cupriforous benzeneazobenzene, reactive, containing trichloropyrimidine group ..	241
derived from cinnoline, studies on ..	317
developments in resonance theory of colour: correlation-function approach ..	286
dissolving, by ultrasonics ..	164
disulphide, preparation ( <i>C</i> ) ..	117
and dyeing methods, developments in fast, for washable and dry-cleanable leather ..	239
fibres and finishes, new developments in ..	321
and fluorescent brighteners, water-soluble, production ..	131
2( <i>SH</i> )-furanone ..	242
<i>o</i> -hydroxyazo, cupric complexes ..	239
identification by paper chromatography ..	207
metallised, for paper ..	393
photochemistry: general processes and techniques ( <i>RP</i> ) ..	223
— role of singlet oxygen and hydrogen peroxide in photosensitised degradation of polymers ( <i>C</i> ) ..	268
quaternised phenylazopyrimidine ..	241
red-sensitising ..	320
reversibly bleaching, for use with giant pulse laser ..	25
— cloth dyed with, simultaneous scouring and bleaching ..	322
sensitising, photographic ..	68
solubilisation by non-ionic surfactants ..	193
soluble, purification and analysis ..	207
for suede shearings: selection of compatible combinations ( <i>ICI</i> ) ..	314
synthetic, application of NMR and mass spectroscopy to problems and concerning and tanning agents, ultraviolet and visible spectra ( <i>P</i> ) ..	6
unsymmetrical meso-oxocarbocyanine ..	318
use as photosensitisers: evidence that singlet oxygen is not involved ..	354
from viewpoints of producer and consumer ..	104
water-soluble, having high tinctorial value in dry state ..	24
— oil-insoluble, heat-stable suspensions in fats ..	166
<b>Dyeability</b> , effect of temperature variations in false-twist texturing of synthetic-polymer fibres on ..	202
<b>Dyeboarding</b> ( <i>P</i> ) ..	79
<b>Dyehouse</b> , automatic control in ..	172
automation in, and future ( <i>Sy</i> ) ..	438
computerised, Canada's first ..	172
measurement of yarn moisture in ..	171
on-line computer control and automation in ( <i>Sy</i> ) ..	426
processes, computer simulation ( <i>AC</i> ) ..	54
<b>Dyemaster</b> ( <i>John Jeffries</i> ) ..	95
<b>Dyeing</b> (see also <b>Coloration</b> , <b>Fixation</b> , <b>Thermofix</b> )	
acetate with basic dyes ..	361
acid, multi-coloured, of natural or synthetic polyamide fibres ..	247
acrylic fibres ..	31
— with basic dyes, carriers for ..	163
— physical chemistry ( <i>C</i> ) ..	149
— and other synthetic copolymers ..	136
adjuvants capable of being partially removed by solubilisation in water ..	245
apparatus, closed, and prevention of condensation ..	130
automated, package and beam ..	167
— package, under pressure ..	172
basic-dyeable polyester fibre ..	73
batchwise, of polyester-cellulosic blends ..	73
— of polyester fibres from perchloroethylene beam, of nylon ..	323
— of nylon ..	204
behaviour, of disperse dyes, effect of crystal modification on ( <i>P</i> ) ..	105
— and physical properties of regenerated-cellulose fibres ..	102
— of Tussar silk, effect of esterification on ..	322

Dyeing—continued

and bleaching, comparison between Mazamet-type sweated wool and sheared wool with reference to chemical properties and behaviour in ..	296
— printing and finishing plants, establishment ( <i>Sy</i> ) ..	422
— retarding damage to hair during ..	31
blends of basic-dyeable and disperse-dyeable polyester-cellulosic fibres by batch and continuous methods ..	296
calcium, and related physical properties ..	201
carpet, preventing jute staining ..	362
carrier, of polyester yarn and knitted fabrics cellulose, with direct or reactive dyes, reactive epoxy derivatives of quaternary ammonium compounds in ..	73
— with reactive dyes, followed by metal-lisation ..	392
— with thiosulphonates of sulphur dyes ..	30
characteristics of polyesters, chromatography paper for determining ..	35
characteristics of textile substrates, modification by printing techniques ..	31
chemically set wool ..	361
cold, of wool ..	323
commission, modern equipment and techniques in ..	30
computer, quality control in ..	36
— and spectroscopy ..	102
constant-temperature, of acrylic knitted goods continuous, of acrylic textiles ..	31
— of carpet ..	192
— of fabrics by one-bath 'extended-time' pad-steam process ..	458
— filament tows, apparatus for ..	284
— of narrow fabrics ..	202
— of nylon tufted carpets ..	168
— of pile fabrics ..	30, 389
— of polyester-cellulose blends ..	296
— of polyester and nylon fibres with disperse dyes from organic solvents ..	203
— process and apparatus for ..	30
— of tubular fabrics ..	401
— of wool tops and polyester tow ..	361
Crimplene yarn and fabrics for men's wear ..	282
Dacron T35-Dacron T64 (basic-dyeable)—wool blended-fabrics ( <i>ICI</i> ) ..	282
disperse, of heat-resistant synthetic-polymer fibres ..	400
— of polycarbonates ..	324
— of polyester fibres, thermodynamic and kinetic aspects ..	323
— theory of absolute rates ..	246
and dye methods, developments in ..	67
economic, of polyester-cotton blends with disperse and reactive dyes by thermofix process ..	102
emulsion, basic physico-chemical principles equilibrium with basic dyes ( <i>C</i> ) ..	151
even, of hosiery ..	192
experiments in non-aqueous media ..	201
fabric, containing amino groups, with acid dyes —containing thermoplastic synthetic-polymer fibres ..	136
— having polypropylene backing and nylon pile ..	168
fibre blends, carriers in ( <i>P</i> ) ..	179
— dye mixture for good results in ..	201
and forming laminated plastics metallised yarn ..	399
fur suede ..	400
future of azoic dyes in ..	168
future of vat dyes in ..	168
garment, under pressure ..	102
grain leather ..	246
hair, composition for ..	168, 400
hank-, machine, further considerations in light of operational mass-transfer processes ( <i>Corr</i> ) ..	278
and heat setting of synthetic-polymer fibres ..	400
high-temperature, of polyester fibres with disazo disperse dyes ..	203

PAGE

PAGE

## Dyeing—continued

hydrophobic synthetic-polymer fibres ..	168
intensification under action of high-frequency electrical field ..	201
irregular, textured polyester yarns and coverage (YDC) ..	19
jet ..	323
— developments in ..	202
— winches and beam machines, high-temperature, in knitting industry ..	284
jig, programme-controlled, of continuous-filament fabrics ..	254
Kapron or wool with Procilyn Blue R, single-bath method for ..	361
keratinous fibres ..	324
— tetrazolium compounds for ..	296
kinetics, Milicevic's treatment as stochastic processes ..	201
knit-deknit, space ..	352
ladies' nylon hose (ICI) ..	95
Lavsan with disperse dyes ..	360
leather, solvent-assisted: rates of uptake of dyes by vegetable-tanned leather at different temperatures ..	323
— tanning agents for use in ..	238
— thermodynamics: dyeing of chrome-tanned hide powder with simple acid dyes ..	327
— — preparation of chrome-tanned hide powders and interaction with C.I. Acid Orange 7 ..	296
level, of acrylic textiles with cationic dyes ..	31
— of Synacril (basic) dyes on Orlon, effect of temperature ..	296
linen-polyester mixtures with solubilised vat dyes ..	361
low-temperature, of nylon ..	31
machines ..	20
— abrasive damage caused to 100% durable-press cotton fabrics by ..	363
— beam ..	130
— high-temperature, in knitting industry ..	284
— jet-, new methods of dyeing ..	73
— paddle ..	192, 316
— winch ..	284
major developments in ..	201
mini-, machine MDI, Ahiba ..	315
mode shades on nylon-spandex fabrics (ICI) ..	161
modified polypropylene, kinetics ..	296
multicoloured, of glass-fibre textiles ..	204
— of yarns, machine for ..	389
natural or synthetic polyamide fibres ..	247
newer nylon fibres ..	202
from non-aqueous media: behaviour of anthraquinone and azo model compounds in hot polar solvents ..	323
— behaviour of anthraquinone disperse dyes in hot polar solvents ..	399
nylon ..	168
— with basic dyes ..	400
— chameuse knitted fabrics ..	30
— containing copolymeric unit having sites for basic dyes ..	247
— granules ..	324
— pelargonic acid as assistant in ..	297
— and polyester textiles ..	361
— type 472 (Qiana) (ICI) ..	282
one-bath, batchwise, polyester-cellulosic blends with disperse, Procion H and Procion H-E dyes (ICI) ..	314
— of polyester-wool blends, influence of carriers in ..	203
— of synthetic-polymer-cellulosic blends with disperse and reactive dyes ..	361
— of wool-cellulose blends or mixtures ..	246
one side of chamois leather black ..	252
package, analysis of factors influencing colour matching in (Sy) ..	433
— effect of rate of flow on dye distribution in (C) ..	12
— plant, continuous automatic ..	316
pad-, with non-cationic dyes ..	102
— thermofix, of polyester-cellulosic blends ..	73

## Dyeing—continued

from perchloroethylene ..	323
piece, of cut-pile carpets, effect of twist level on stabilisation of wool yarn for (Corr) ..	61
— multicolour techniques ..	30
— on winch of fabrics in Terylene plus T (75:25 Terylene-wool containing series 33 Terylene) (ICI) ..	314
pile fabrics ..	389
polychromatic ..	246
— new method of textile coloration ..	30
— in textile industry ..	323
polyester-cellulose blends, with disperse and azoic dyes ..	324
— by exhaustion methods ..	203
— preventing migration of disperse dyes when ..	247
— by thermofix method ..	203
polyester fibres (CGY) ..	160
— nylon blend fibres with anthraquinone disperse and vat dyes ..	168
— reduction clearing process in (ICI) ..	59
— surgical sutures with indigo ..	400
— textile fabric in perchloroethylene by exhaust process ..	509
— viscose rayon blends by pad-thermofix method ..	20, 30
— yarn and knitted fabrics ..	360
polyolefins with metallisable azoic dyes ..	204
polypropylene fibres ..	360
— modified by nickel stearate ..	323
polyurethane surfaces of leather substitutes ..	204
post-, of acrylic adhesive-bonded fabrics ..	30
— of bonded fabrics ..	30
preparation and finishing, cloth ..	400
and pretreatment, of polyester-cotton fabrics ..	201
— of texturised polyester yarn and fabric ..	102, 203
preventing staining of nylon by jute during ..	324
processes, batchwise, direct digital control ..	172
— carpets, TAK multicoloured ..	360
— constant-temperature, for nylon fibres: practical considerations (Sy) ..	473
— — study of mechanisms (Sy) ..	463
— fully continuous, possibilities of use of reactive dyes in ..	30
— multicoloured ..	400
— in pre-Columbian America ..	36
production, $\Delta E$ by differential colorimetry in ..	299
properties, of basic dyes on acrylic fibres, tentative tests for evaluation (BDC) ..	60
— of keratin fibres, modifying ..	250
— of monoazo dyes derived from substituted 2-aminobenzothiazole-3-N-oxides on various synthetic-polymer fibres (C) ..	309
— of nylon, modifying ..	29
punch-card dye control ..	172
rapid, of nylon textiles with anionic dyes ..	31
reactive, of crease-recovery cloth from partially carboxymethylated cotton ..	248
— mechanism ..	30, 201, 360
— of wool, principles and problems ..	202
recipes, automatic prediction ..	254
— calculation using vector equation in Kubelka-Munk colour space ..	364
Remazol, changes of cystine content in ..	184
and/or scouring, high-temperature, of loose fibres ..	401
shrink-resist wool ..	296
silk with reactive dyes ..	361
solid-state, of polyesters ..	168, 297
solvent ..	360, (Sy) 503
— with acid dyes ..	400
— of anionic synthetic-polymer fibres with basic dyes ..	324
— assisted, of leather: rates of uptake of dyes by zirconium-tanned leather and deaminated hide powder ..	400
— development in ..	246
— of human hair ..	362
— of hydrophobic fibres ..	297
— new machinery for ..	315
— of nylon fibres ..	246
— practical experiences in (Sy) ..	514
space ..	74, 246, 247

## Dyeing—continued

space, modification ..	202
spray, of leather ..	296
— of textiles on forms ..	192
standard heats and standard entropies of, for quinazolone azo dyes (Corr) ..	348
suede woollens ..	296
surface, of soft gelatin capsules for medical use ..	401
synthetic-polymer fibres containing anionic or basic groups ..	324
systems, diffusion phenomena in ..	201
— for high-bulk acrylic yarns ..	191
tanning, leather, aminoplast-sulphonated phenolic compounds as assistants in ..	76
tensionless piece ..	361
test, apparatus for ..	192
textiles with any class of dye ..	324
texturised polyester materials, recent developments in ..	102
— nylon mixtures (YDC) ..	161
— theory and practice ..	296
theory, historical development ..	102
thermofix ..	73
tows and slivers ..	401
transparent, of polyesters ..	400
Trevira slubbing for polyester-wool blends ..	30
triacetate-polyester blends (YDC) ..	19
unlevel-dyeing nylon fabric, preventing stripiness when ..	168
variegated, of tissue paper ..	324
Variline (ICI) ..	161
vat, of fabric, problems and sources of faults in ..	102, 201
— influence of formaldehyde in ..	246
— of modified polypropylenes ..	247
— processes, reducing agents in ..	73
— use of thiourea dioxide in ..	360
warp-knitted fabrics on air-injection HT beam machines ..	203
water consumption in (P) ..	141
wet leather ..	400
or wet processing, of hides ..	389
— of textiles ..	192
wool, with acid dyes, mechanism ..	202
— by cold pad-batch method ..	202
— effect of carbonising on (C) ..	114
— with Hostalan dyes ..	102
— modern methods for ..	296
— polyester and acrylic fibre tops by continuous pad-steam methods (P) ..	257
— polyester blends ..	297
— in presence of benzyl alcohol ..	246
— rapid, low-temperature, investigations towards (C) ..	334
— study of reaction with reactive dyes under industrial conditions (C) ..	181
— synthetic-polymer blends ..	400
wound packages, dye penetration in ..	295
yarn-, machine, laboratory ..	315
<b>Dyeings, bright green, production and colorimetric examination ..</b>	168
bright vivid, on cellulose esters with cationic dyes ..	324
and colourings, colour deviations, measuring, and maintaining within prescribed tolerances ..	300
deep, on synthetic-polymer fibres ..	297
of good fastness on wool, Hostalan dyes for ..	202
and prints, reactive, on nylon, fixation ..	204
<b>Dyeing and finishing acrylic fibres and blends with other fibres (BASF) ..</b>	19
cardigans, sweaters and pullovers ..	80
differential-dyeing textured-polyester and nylon fabric ..	246
half-hose (P) ..	77
high-temperature, of fabric, apparatus for ..	130
industry, future, structure and technology (Sy) ..	406
laboratory control in ..	253
ladies' hose (P) ..	79
knitted garments (P) ..	77
leather in ritual tanning ..	30
machinery, IITMA 1971 (RP) ..	254
— (Erratum) ..	352



PAGE

PAGE

PAGE

PAGE

**Dyeing and finishing—continued**

- miniature electric instrumentation in .. 172
- polyester fibres and blends (*BASF*) .. 19
- and preparation, solvent .. 295
- prospects for radiation techniques in (*Sy*) .. 496
- resin, reactive, simultaneous .. 401
- solvent .. 295
- texturised-polyester fibre .. 246, 296, 323
- vertical integration with warp knitting .. 30
- Dyeing or printing with aminoiminopyrrolinones**  
in presence of copper or nickel compounds,  
auxiliary for .. 361
- anionic polymeric fibres with heteropoly acid  
complex of basic dyes .. 204
- applications of methods of macroscopic  
kinetics for describing rate of fixation of  
reactive dyes on fibre during .. 201
- azoic, of polyester and cellulose fibres and  
blends .. 169
- continuous, of synthetic-polymer textiles .. 203
- of webs .. 31
- natural polyamides with reactive dyes, levelling  
agent for .. 163
- polyester fibres .. 297
- processes, use of hydrotropic compounds for  
intensifying .. 102
- reactive, of natural and synthetic polyamides .. 400
- by solvent-assisted processes (*P*) .. 329
- solvent, continuous, of cellulose ester .. 361
- synthetic-polymer-cellulose blends with basic  
dyes .. 73
- thermofix, of tows and slivers .. 401
- transfer .. 400
- Dyer and finisher, role in care-labelling of**  
textiles .. 172
- Dykol Green SBT (*SDC*)** .. 314

**E**

- Easy-care finishes for cotton using dimethyloldi-**  
hydroxyethyleneurea .. 402
- Ecological study group (*Corr*)** .. 233
- Effluent (see also Dewatering, Drying, Ecological,**  
**Clarification, Flocculating, Pollution,**  
**Water, Wastes) (*Sy*)** .. 408
- apparatus for treating, by flocculation and  
aeration .. 285
- from carpet yarn dyehouse, decolorisation .. 353
- chlorination .. 22
- containing paint, treating .. 237
- disposal and water conservation in wool  
textile industry (*Sy*) .. 481
- floculant and settling aid for treating  
industrial, biochemical oxygen demand .. 237
- purification .. 22
- removal of non-biodegradable detergents from  
removal of phosphorus from .. 22
- removing phosphates by treatment with iron  
oxide .. 193
- sludge, reducing water content .. 130
- textile, purification .. 285
- treatment with activated carbon .. 21
- treatment .. 22, 130, 237
- and developments in processing .. 21
- electrochemical techniques for .. 390
- ozone for .. 390
- and water conservation .. 285
- Electrodeposition (see Coating)**
- Elastomer (see also Identification, Stabilisers)**  
— silica wet masterbatches .. 359
- Electrochemical techniques for effluent treatment**  
**Electrocoating system, typical, factors affecting**  
pigment behaviour of titanium dioxide in .. 294
- Electroconductive flock** .. 206
- Electrodeposition, aqueous coating composition**  
for .. 28
- Electron and optical microscopy of photo-**  
degraded fibres .. 35
- spin resonance (*RP*) .. 223
- study of radical intermediates in photo-  
reduction of xanthene dyes .. 239
- transmission, microscopy and textile finishing .. 35

- Electronics, automation of plant without know-**  
ledge of .. 254
- Electrophoretic deposition, composition for**  
study of surface properties of coated titanium  
dioxide pigments .. 287
- Electrostatic images, liquid developers for**  
properties of cotton and cotton-polyester  
blends .. 249
- toner .. 244
- Elisiane Turquoise JL (*Fran*)** .. 314
- Embossing apparatus**  
chemical .. 299
- of seersucker or crepe finish on fabrics of  
poly(vinyl alcohol) fibres .. 206
- Emulsifying agents, silicon compounds** .. 23
- synthesis and investigation of surface-  
active properties of monoethyl-poly(ethylene  
glycol esters) of aliphatic acids used as .. 237
- softening and bactericidal agents .. 67
- Emulsions, cationic resin, for use in paper-**  
making .. 251
- polymer, properties and costs of monomers in  
— polymerised resins, controlled application  
under alkaline conditions .. 249
- Enamels and lacquers, universal colour bases for**  
thermosetting acrylic .. 167
- of high weather resistance .. 294
- for wires .. 321
- Epoxy (see also Printing)**  
derivatives, reactive, of quaternary ammonium  
compounds in dyeing of cellulose with  
direct or reactive dyes .. 73
- resins (see Coating compositions)
- Epichlorohydrin-nylon resin, reaction with wool**  
vapour, crosslinking cellulose with .. 33
- modifying cellulose with, in two steps .. 206
- Erioclarite B, pastel and fashion shades with (*Gy*)**  
**Esterification of cellulose with unsaturated long-**  
chain fatty acids in presence of trifluoro-  
acetic anhydride .. 169
- Etherifying cellulose and starch with fluorinated**  
mono-olefins .. 170
- Europium chelates, fluorescent, with tetradentate**  
ligands .. 166
- Euthylen colours in polyethylene film (*BASF*)** .. 281
- Euvynil pigments in PVC (*BASF*)** .. 281

**F**

- Fabrics, bonded and coloured** .. 251
- dyeable, dextrin-modified latex-treated .. 299
- dyed, origins of stripiness in .. 295
- layers, hydraulic resistance .. 203
- for protection against noxious gases .. 251
- radiation-resistant .. 251
- sheer, non-sag finish for .. 76
- textile, structure, relation of moisture-vapour  
transmission to .. 171
- Fade-resistant sheet for making colour projec-**  
tion transparency .. 325
- Fading (see also Gas-fume, Ozone)**  
light, behaviour of disperse dyes .. 194
- or yellowing by exposure to light, 1,7,7-tri-  
methyl-3-benzylidene-bicyclo-(2,2,1)-hepta-  
none-2 for stabilising cosmetic preparations  
to .. 316
- Fastness (see also Dry cleaning, Gas fume, Light,**  
**Ozone, Rubbing, Washing, Weathering)**  
to detergents, outstanding, electrodepositable  
coatings having .. 321
- of disperse dyes to sublimation .. 391
- of finish, influence of resins used in mildew-  
proof finishes on .. 326
- testing, colour-, standard reference wool fabric  
for .. 364
- Fat dyes (*FH*)** .. 281
- Fats, heat-stable suspensions of water-soluble  
oil-insoluble dyes in .. 166
- Fatty acids, alkylamides of, use for printing of**  
tops .. 103
- Felting behaviour of wool, correlation with**  
surface chemistry .. 399

**Felting—continued**

- power of wool, reducing .. 250
- Ferrate (III), hexacyano-, ions in photochemical**  
recording .. 31
- $\alpha$ -Ferric oxide flakes, transparent .. 27
- Ferrous surfaces, protective coatings for** .. 244
- Fibres, chemical modification** .. 327
- chemistry and physics .. 294
- dyes and finishes, new developments in .. 321
- experimental, from formaldehyde copolymers  
and fabrics, black, heat-resistant .. 251
- and finishes, textile, trimethylsilyl derivatives  
for gas-chromatographic analysis .. 171
- formation of condensation polymers in or on  
inorganic (see Lubricating) .. 404
- micro-structure .. 104
- new non-flammable, Cordela .. 321
- optics colorimeter .. 36, 254
- reactions of organosiloxane oligomers on  
surface .. 169
- Fillers and colorants, finely divided, granulation**  
content of coating composition on web,  
apparatus using radiation to measure .. 328
- for papers, improved clays for .. 398
- and pigments, binders for aqueous dispersions  
of synthetic resins resistant to saponification .. 294
- Films (see also Colouring)**  
polymer, diffusion in water in .. 252
- Filter and antihalation dyes, tri- and penta-**  
methine .. 289
- Finishes, durable, set, for fabrics composed of**  
fibres containing free hydroxyl groups .. 403
- soft, for fabrics .. 250
- dyes and fibres, new developments in .. 321
- and fibres, textile, trimethylsilyl derivatives for  
gas-chromatographic analysis .. 171
- for glass fibres .. 316
- hydrophobic, effect on phototropy of vat dye  
for imparting durable fastness to gas-fume  
fading to spandex fibres .. 316
- impacting soft handle .. 206
- non-slip delustrant .. 299
- non-sag, for sheer fabrics .. 76
- for nylon staple fibres .. 353
- for nylon yarns .. 67
- patina, for cupreous surfaces .. 294
- semi-matt, for coated paper .. 327
- textile, compatibility with wounds and injuries  
— effect of poly(vinyl alcohol) on .. 298
- *N*-methylol-*N'*-subst.-4,5-dihydroxy-2-imid-  
azolidones as .. 193
- progress in .. 75
- Finisher and manufacturer of knitted fabrics,**  
relationship between .. 403
- Finishing (see also Dyeing and finishing, and**  
**under specific processes)**  
acrylic-cellulose blend fabrics .. 363
- additions for durable-press knitted cotton  
fabrics .. 326
- agents, for cellulose textiles .. 193
- textile, epoxyalkyldioxans as .. 276
- bleaching, dyeing and printing plants,  
complete, establishment (*Sy*) .. 422
- cellulosic fibrous material .. 75
- and colouring composition for leather and  
coated fabrics .. 34
- commission, analysis of present and future  
position (*Sy*) .. 410
- composition for textiles .. 193
- durable, bacteriostatic, of textiles .. 402
- batchwise methods .. 205
- of cellulose, industrial methods .. 205
- in relation to products used .. 248
- dyeing and preparation, solvent .. 295
- effect on visual and functional characteristics  
of knitted fabrics .. 75
- equipment, textile, measurements of tempera-  
ture in .. 404
- fabrics made from cellulosic fibres, contribu-  
tion to study of correct application of  
products with crease-resist effect in .. 326
- industry, textile, economic significance of auto-  
mation and process control in .. 254

	PAGE		PAGE		PAGE
<b>Finishing—continued</b>		<b>Flame retardant—continued</b>		<b>Fluorescent brighteners—continued</b>	
knitted fabrics .. .. .	298, 402	finishes, durable, for cotton using cyanamide-THPC resins .. .. .	23	oxacyanine, for use with quaternary ammonium softening agents .. .. .	241
— of package-dyed texturised Dacron .. .. .	75	finishing of cotton fabric with methylolated tris(2-carbamoylethyl)phosphine oxide .. .. .	363	1,3,4-oxadiazole compounds .. .. .	242
— polyester .. .. .	362	rayon containing halogenated phosphonitrate polymer .. .. .	200	7-oxadiazolycoumarin .. .. .	320
machinery for knitted goods .. .. .	389	treatment of wool .. .. .	326	in paperboards, determination of effectiveness .. .. .	328
plant, large-scale, fully automatic processing in .. .. .	36	tris(halogenoalkyl)phosphite-modified cellulose .. .. .	250	3-phenyl-7-aryltriazolycoumarin derivatives as phenylcoumarintriaryl .. .. .	289
processes, batchwise, programmed control .. .. .	254	<b>Flammability and burning characteristics of textiles, testing .. .. .</b>	207	and pigments, <i>o</i> -amino .. .. .	357
— more rapid mild-cure, for imparting crease resistance to cotton .. .. .	32	carpet, test procedure, development .. .. .	328	polymeric, for use with ultraviolet absorber in colour photographic paper .. .. .	358
resin, of tubular-knitted fabric, apparatus for sheets formed from self-bonding film-fibril strands .. .. .	404	fabric .. .. .	253	pyrazoline .. .. .	70, 397
solvent-based, machine and process development for .. .. .	74	of fibre blends .. .. .	321	3-pyrazolyl-7-triazolycoumarins .. .. .	242
technology, modern, development from machine-maker's viewpoint .. .. .	315	rate, of textiles, measurement .. .. .	328	styrylbenzoxazoles as .. .. .	320
textile .. .. .	74, 204	of textiles, methods of testing .. .. .	207	3-substituted-7-aminocoumarin, preparation .. .. .	291
— continuous, with solvent recovery equipment and technology .. .. .	325	<b>Flattening agent, diatomaceous silica as .. .. .</b>	243	substituted 2-phenylbenzotriazole .. .. .	242
— with copolymers .. .. .	363	<b>Flavanthone, photochromic behaviour .. .. .</b>	23	thiazolo(5,4 <i>d</i> )thiazole .. .. .	396
— and optical microscopy .. .. .	171	<b>Flax (see Bleaching)</b>		triazylaminostilbene .. .. .	242, 358
— in organic solvents .. .. .	204	<b>Flexographic (see Printing)</b>		7-triazylcoumarins .. .. .	99
— polyurethane elastomers in .. .. .	104	<b>Flocculating agent .. .. .</b>	163	triazylstilbene .. .. .	396
— procedures in .. .. .	363	— for industrial waste water .. .. .	163	triazylcoumarins .. .. .	25, 198
— and transmission electron microscopy .. .. .	35	— non-ionic synthetic organic latexes as .. .. .	353	$\gamma$ -triazolylstyrylbenzoxazoles .. .. .	320
— versatility of calenders in .. .. .	325	— polyacrylamide-based .. .. .	163	and ultraviolet absorbers, polymeric, for photographic purposes .. .. .	242, 291
— wastes, biological treatment .. .. .	390	— quaternary nitrogenous cellulose ethers .. .. .	23	for use in detergents .. .. .	99
treatments, absorption of formaldehyde on cotton in .. .. .	103	— and settling aid for treating effluents .. .. .	163	<b>Fluorescent brightening (P)</b>	180
wet and dry, of woven and knitted fabrics, sewing problems in .. .. .	402	power of polyacrylamide flocculants and influence on electrokinetic potential .. .. .	285	comparison, in production of synthetic-polymer fibres and in textile industry (P) .. .. .	365
wool—Vestan 21 fabrics .. .. .	33	<b>Flocculation and aeration, apparatus for treating effluents by .. .. .</b>	285	nylon (P) .. .. .	367
worsted and woollen woven fabrics containing Terylene (ICI) .. .. .	283	dispersion, and pigment volume concentration, measuring undertone of tinted paint and effect of pigments in paint films, prevention .. .. .	244	polyester (P) .. .. .	365
woven and knitted fabrics .. .. .	205	and precipitation, chemical, of aqueous wastes .. .. .	163	textile and mass, distinguishing between (P) .. .. .	369
<b>Fire-retardant cellulose .. .. .</b>	249	water purification by .. .. .	192	<b>Fluorescent coatings</b>	199
<b>Fixanol PN: aftertreatng agent for use with dyed cellulosic textiles (ICI) .. .. .</b>	282	<b>Flocking systems, acrylic, statistical procedure for selection .. .. .</b>	325	complexes, new, in stilbene series .. .. .	23
<b>Fixation (see also Steaming)</b>		<b>Flocks, coating composition for .. .. .</b>	285	europlum chelates with tetradentate ligands .. .. .	166
of dry powder images on paper .. .. .	325	electroconductive .. .. .	206	ferromagnetic powder as flow detection particles .. .. .	243
of dyes .. .. .	103	<b>Flotation, flocculation and sedimentation of pigments in paint films, prevention .. .. .</b>	72	pigment .. .. .	358
— by high-energy irradiation .. .. .	168	<b>Flow detection particles, fluorescent ferromagnetic powder as .. .. .</b>	243	tracing agents, fluoranthene and pyrene as .. .. .	398
— with polyfunctional crosslinking agents .. .. .	246, 295	<b>Fluidised-bed production of red iron oxide .. .. .</b>	243	<b>Fluorine, hydrofluoric acid and oxygen difluoride, bleaching wood pulp with .. .. .</b>	322
— seals for use in machines for .. .. .	162	<b>Fluoran compounds for use in pressure-sensitive copy paper .. .. .</b>	24	<b>Fluorocarbons, organic, stain, water and oil repellency by use of .. .. .</b>	238
method, choice in printing reactive dyes (P) .. .. .	371	<b>Fluorantene and pyrene as fluorescent tracing agents .. .. .</b>	398	topcoat and pigmented acrylate coating, substrates coated with .. .. .	28
of polyester prints in superheated steam .. .. .	325	<b>Fluorescein derivatives, metallic salts for electrophoretic imaging processes .. .. .</b>	165	<b>Fluoropolymers, study of staining behaviour through contact angles in air and under water .. .. .</b>	298
of prints of cationic dyes by hot air or steam .. .. .	74	<b>Fluorescence of 2,6-bisoxazolynaphthalenes .. .. .</b>	286	<b>Flushing of dispersed pigments from aqueous to non-aqueous media .. .. .</b>	100
of reactive dyeings and prints on nylon .. .. .	204	<b>of N-substituted aminostilbenes .. .. .</b>	286	<b>Food colorant .. .. .</b>	166, 291, 320
of textile prints .. .. .	401	<b>Fluorescent brighteners (see also Coating, Printing)</b>		dyes .. .. .	291
<b>Flame repellent, mixture of phosphorus amides for rendering cellulosic fibrous material .. .. .</b>	238	3-arylcoumarin, synthesis .. .. .	391	— carotenoid .. .. .	166
<b>Flame resistance and crease recovery of textiles, improving .. .. .</b>	206	(anthracenotriazole)benzoic acid derivatives .. .. .	242	— diketo .. .. .	134
properties, phosphorylation of cyanoethylated cellulose to impart .. .. .	251	asymmetric derivatives of bis(triazylamino)stilbene .. .. .	25	— monoazo .. .. .	288
of textiles, methods of testing .. .. .	171	bispyridoxazolestilbene .. .. .	396	— phenylazonaphthol .. .. .	393
<b>Flame test, vertical, effect of certain variables in .. .. .</b>	35	bistriazylaminostilbene .. .. .	320	<b>Formamide (see Ink)</b>	
<b>Flame-resistant carpets .. .. .</b>	363	— for paper .. .. .	396	<b>Formaldehyde (see also Crosslinking)</b>	
cellulose esters .. .. .	295	bistriazylstyrene .. .. .	358	absorption, on cotton in finishing treatments .. .. .	103
finish, for acrylic and modacrylic textiles .. .. .	327	cationic naphthalimide .. .. .	292	— by wool .. .. .	326
— for cellulose fibres .. .. .	249, 364	for cellulose .. .. .	396	copolymers, experimental fibres from .. .. .	359
— and crease-recovery finish .. .. .	205	— polysulphonated bis-s-triazylamino-stilbene-2, 2'-disulphonic acids .. .. .	358	free, removal from fabrics sensitised with carbamates .. .. .	248
— and soil-resistant finishes for cotton wool .. .. .	104	composition, anionic, for hydrophobic and hydrophilic fibres .. .. .	166	influence in dyeing with vat dyes .. .. .	246
<b>Flame retardancy .. .. .</b>	326	— for application to both hydrophilic and hydrophobic fibres .. .. .	316	— modified cellulose, degradation study .. .. .	75
of cotton fabrics, effect of laundering on .. .. .	403	as derivatives of flavonic acid, thin-layer chromatographic identification .. .. .	404	— sulphur dioxide, gaseous, durable-press process .. .. .	248
current legislative requirements and test methods for .. .. .	253	1, 3-diarylpyrazole .. .. .	198	— terpene sulphonic acid condensates: tanning agents for use in dyeing leather .. .. .	238
natural, of wool, use of titanium complexes to improve (Cott) .. .. .	277	dispersible, paper chromatography .. .. .	253	— urea particles, pigmentary, as paint extenders .. .. .	135
<b>Flame-retardant agent, cellulose ester containing .. .. .</b>	360	and dyes, water-soluble, production .. .. .	131	<b>Formazan dyes, water-soluble cationic metal complexes as .. .. .</b>	164
— for cotton .. .. .	238	finely dispersing, in solid detergents .. .. .	163	<b>Formic acid, contoured pattern on nylon fibrous surface with .. .. .</b>	250
— methylol phosphorus polymers as .. .. .	22	mono- and di-phthalimidyl derivatives as .. .. .	291	effect of concentration on swelling of wool (C) .. .. .	335
— for rayon, alkoxyposphazenes as .. .. .	193	naphthalimide derivatives as .. .. .	240, 358	<b>Foron Blue SE-2R (S) .. .. .</b>	283
— reactive, phosphonyl isocyanates .. .. .	23	naphthylene-bis-2-benzimidazoles as .. .. .	292	Brilliant Yellow E-3GFL (S) .. .. .	95
and anti-corrosive paint .. .. .	321			Dark Blue E-BR (S) .. .. .	283
carpet backing .. .. .	204			<b>Forosyn HS colours (S) .. .. .</b>	96
fibres, fabrics and polymers .. .. .	32			<b>Frosting of fabrics containing polyester fibres .. .. .</b>	208
Finishes based on THPC, effect of hypochlorite bleach .. .. .	363			<b>Fuel technology, modern, in textile industry .. .. .</b>	191
— for cellulose .. .. .	249			<b>Fungicidal and bactericidal agents .. .. .</b>	238

PAGE		PAGE
	<b>Fungicides and colorants, metal oxide acylates useful as</b> .. .. .	358
291	<b>Fur (see Drying)</b> .. .. .	
242	<b>Furans, dihydrodibenzo-, photochromic</b> .. .. .	26
320	<b>Furnace black (see also Carbon black, Channel black)</b> .. .. .	166
328	high-quality, apparatus for producing .. .. .	315
289	modified, as substitute for channel black .. .. .	359
131	non-staining .. .. .	321
357	of pronounced increase in surface area, reactor yielding .. .. .	353
358	reducing pH and increasing volatile content by heating with thiourea .. .. .	397
70, 397	<b>Furnace-burner combination for producing carbon black of enhanced structure</b> .. .. .	315
242	vertical, having improved flexibility of operation for manufacture of carbon black .. .. .	191, 237
320	<b>Fuzzing, pilling and wearing properties, nylon composition for coating and impregnating carpets to improve</b> .. .. .	364
242, 358		
99		
396		
25, 198		
320		
	<b>G</b>	
242, 291	<b>Gallotannin, decomposition in alkaline solution (P)</b> .. .. .	7
99	molecule, steric conformation (P) .. .. .	5
180	tannic acid, ultraviolet spectra (P) .. .. .	6
365	<b>Gamma radiation, effect on breaking properties of rayon</b> .. .. .	245
367	<b>Garments (see also Durable-press, Dyeing, Dyeing and finishing, Smooth-drying) manufacture by processor (Sy)</b> .. .. .	407
365	press for .. .. .	191
369	treatment of selected parts .. .. .	136
199	<b>Gaseous treatment, continuous, of moving webs</b> .. .. .	352
23	<b>Gases, noxious, fabric for protection against</b> .. .. .	251
166	<b>Gas-lume fading, of dyed acetate material, inhibition</b> .. .. .	361
243	— fastness, durable, finish for imparting to spandex fibres .. .. .	316
358	<b>Gel-permeation of cellulose: measurement of pore structure of unmodified and mercerised cotton fibres</b> .. .. .	75
398	properties of cellulose: changes in pore structure of fibrous cotton produced by crosslinking with formaldehyde .. .. .	103
322	<b>Geodesic chromaticity diagram</b> .. .. .	300
238	<b>Germicidal finish, durable</b> .. .. .	403
28	<b>Germicides, kaolin slurries containing peroxy-hydrates as</b> .. .. .	404
291, 320	<b>Glass (see also Colouring, Printing) coloured coated</b> .. .. .	36
291	colours in .. .. .	172
166	dichroic .. .. .	36
134	<b>fibre (see also Binding, Desizing, Drying, Dyeing)</b> .. .. .	
288	— development .. .. .	200
393	— fabric, of improved resistance to abrasion .. .. .	250
	— finish for .. .. .	316
103	— size of low migration, low tension and complete burn-off on .. .. .	285
326	ink for application to .. .. .	294
359	soda-lime .. .. .	135
248	<b>Gloss haze, determination as function of dispersion of paint films containing titania</b> .. .. .	253
246	of paint films, significance of dimensions of reflectometers used for measuring .. .. .	300
75	retention, improved, metal oxide pigments having .. .. .	293
248	<b>Glucose and acetone in water, photoreductions with (C)</b> .. .. .	346
238	and <i>o</i> -chlorobenzoic acid in water, photoreductions with (C) .. .. .	347
135	<b>Glycidyl ethers, fluorinated, as water- and oil-repellent finishes</b> .. .. .	193
164	<b>Glycol ethers, characterisation by as chromatography</b> .. .. .	404
250	<b>Glyoxal-based durable-press resins, mechanisms of reaction with cotton</b> .. .. .	326
335	<b>Grafting proteins on to wool using diepoxides as crosslinking agents</b> .. .. .	75
283	radiation, of acrylic acid on polyester fibres .. .. .	101
95	— on cotton textiles .. .. .	103

	<b>Granulation of finely divided colorants and fillers</b> .. .. .	359
	<b>Grease, residual, on scoured wool, rapid determination</b> .. .. .	171
	<b>Grinding, salt, of colorants to pigment grade</b> .. .. .	359
	sand, compared with ball milling in relation to pigment particle size .. .. .	23
	<b>Guanamines, aryl-, as antiseptic and rotproofing agents</b> .. .. .	286
	<b>Guide, web</b> .. .. .	284

**H**

	<b>Hair (see also Bleaching, Coloration, Dyeing) dyes</b> .. .. .	131
	— basic .. .. .	359
	— compositions containing indoline derivatives .. .. .	290
	— naphthoquinone .. .. .	197
	— imine .. .. .	358
	human, interaction with polyethylenimine .. .. .	322
	<b>Handle of fabrics containing polyester fibres, improving</b> .. .. .	251
	soft, finish imparting .. .. .	206
	<b>Handling and control of tubular-knitted fabrics</b> .. .. .	352
	<b>Hardboard, decorative coating for</b> .. .. .	135
	<b>Harrison colorimeters, precision of measurements with (CMC)</b> .. .. .	379
	<b>Heat recovery in paper or paper-pulp drying</b> .. .. .	96
	— resistant black fibres and fabrics .. .. .	251
	— resistant substrate, printing epoxy coatings on setting (see also Setting) .. .. .	298
	— and dyeing of synthetic-polymer fibres .. .. .	400
	stability of nylon fibre, improving .. .. .	33
	transfer (Sy) .. .. .	408
	treatment, of continuous sheet material .. .. .	284
	— and drying with near-infrared radiation .. .. .	325
	— of textile fabrics .. .. .	204
	— apparatus for .. .. .	389
	<b>Heating, selective, of textiles with microwaves</b> .. .. .	162
	<b>Helizarin system of textile printing (BASF)</b> .. .. .	18
	<b>Hemicyanine dyes and cyanine dyes for use with radiation-activatable titanium dioxide for copying purposes</b> .. .. .	293
	of excellent photosensitising properties .. .. .	293
	*styryl, merocyanine and complex dyes .. .. .	241
	<b>Hemioxonol, oxonol, benzylidene and cinnamylidene dyes</b> .. .. .	165
	<b>Hides (see Dyeing, Processing)</b> .. .. .	
	<b>Hiding power of alkyd paint systems, adsorption of alkyd resins by titanium dioxide and relation to</b> .. .. .	294
	<b>Hopkinson J G (Obituary Notice)</b> .. .. .	92
	<b>Hose (see Dyeing and finishing)</b> .. .. .	
	<b>Hosiery (see Dyeing)</b> .. .. .	
	<b>Hostalan dyes, dyeing wool with</b> .. .. .	102, 201
	<b>Hostaperm Blue AN (FH)</b> .. .. .	160
	Blue B3G50 (FH) .. .. .	282
	Brown HFR (FH) .. .. .	281
	Red EG (FH) .. .. .	281
	Red Violet ER (FH) .. .. .	281
	Yellow R Colanyl (FH) .. .. .	282
	<b>Humidity factor in durable-press finishing</b> .. .. .	248
	<b>Hydrazone compounds containing azoic coupler moiety</b> .. .. .	196
	<b>Hydrogen peroxide (see also Stabilisation) action on wool</b> .. .. .	104
	in alcohols, photoreductions with (C) .. .. .	345
	indicators for determination of .. .. .	171
	and singlet oxygen, role in photosensitised degradation of polymers (RP) .. .. .	268
	stability during high-temperature continuous bleaching of cotton fabrics .. .. .	322
	<b>Hydrophilic polymer surfaces via radiation-chemical treatments</b> .. .. .	103
	<b>Hydrophilicity of materials, increasing</b> .. .. .	404
	surface, increasing .. .. .	252
	<b>Hydrotropic compounds, use for intensifying dyeing and printing processes</b> .. .. .	102
	<b>Hypochlorite bleach, effect on flame-retardant finishes based upon THPC</b> .. .. .	363
	oxidation of cellulose in presence of manganoous hydroxide (C) .. .. .	228

**I**

	<b>Identification of dyes by paper chromatography</b> .. .. .	207
	of natural and polyisoprene rubber and mixtures .. .. .	253
	of neoprene .. .. .	253
	of nitrile elastomers .. .. .	253
	of panacril rubber .. .. .	253
	of polyurethane elastomers .. .. .	253
	of poly(vinyl chloride) .. .. .	253
	of residual processing aids on synthetic-polymer fibres .. .. .	208
	<b>Illumination in textile manufacturing processes</b> .. .. .	208
	<b>Ilmenite ores, titanium dioxide concentrate from</b> .. .. .	293
	<b>Images (see also Developing)</b> .. .. .	
	black-line, diazotype composition for production .. .. .	247
	dry powder, fixing on paper .. .. .	325
	electrostatic, liquid developer for .. .. .	136, 321
	<b>Imaging, photochromic photoresist</b> .. .. .	32
	photoelectrophoretic, quinacridones as electrically photosensitive particles in .. .. .	74
	processes, electrophoretic, metallic salts of fluorescein derivatives .. .. .	165
	<b>Imperon pigments in textile printing (FH)</b> .. .. .	19
	<b>Impregnating and coating agents, crosslinkable and coating carpets to improve wearing, pilling and fuzzing properties, nylon composition for</b> .. .. .	364
	vacuum, of textile materials difficult to wet with aqueous baths (ICF) .. .. .	314
	<b>Indanthren dyes (BASF)</b> .. .. .	95
	<b>Indazole dyes (see Basic dyes)</b> .. .. .	
	<b>Indicators for determination of hydrogen peroxide</b> .. .. .	171
	<b>Indigoid series, studies in: new mixed condensed azo-indigoid dyes</b> .. .. .	194
	<b>Indocyanine and triphenylmethane dyes, combination as sensitizers for direct positive emulsions</b> .. .. .	401
	<b>Indole dyes, trimethine</b> .. .. .	318
	nucleus, 2-aromatically substituted, dimethine dyes containing .. .. .	196
	<b>Indoline derivatives, hair dye compositions containing</b> .. .. .	290
	<b>Inhibitors, ultraviolet, and colorants in plastics</b> .. .. .	397
	<b>Inks (see also Printing inks)</b> .. .. .	
	anti-feathering, containing antistatic agent .. .. .	245
	for application to glass .. .. .	294
	capillary-type, having as vehicle liquid containing at least 10% by weight of foramide coded .. .. .	398
	containing lignin-based colorants .. .. .	244
	density, measurement .. .. .	35
	dye derivatives useful as .. .. .	136
	edible and indelible, for pharmaceutical pellets gravure, colour, mixing, matching and maintaining .. .. .	74
	improving adhesion to polyolefins .. .. .	169
	invisible, on containers, application and detection .. .. .	298
	magnetic, lecithin as surfactant in .. .. .	244
	non-aqueous .. .. .	167
	and paints, identifiable .. .. .	321
	— and metals, improving receptivity of plastic surfaces for .. .. .	252
	for pens having porous tips .. .. .	294
	photoluminescent, encoding information with, and reading encoded information .. .. .	325
	poly(vinyl chloride), for fabrics, plastisol, high-molecular-weight .. .. .	294
	for printing on lubricated surfaces .. .. .	321
	for recorder pens .. .. .	136
	— transfer coating composition .. .. .	167
	treating plastics to improve receptivity to and adhesion .. .. .	170
	<b>Instrumentation in textile industry</b> .. .. .	191
	<b>Interlining, iron-on</b> .. .. .	191
	<b>Investment, neglected</b> .. .. .	208
	<b>Iodine-sorption test: factors affecting reproducibility and semi-micro adaptation</b> .. .. .	171
	<b>Iron blue, surfactant coating to improve storage stability</b> .. .. .	359
	castings, coarse, black oxide coatings on .. .. .	167





PAGE

Mass-coloration—continued	
Mass and NMR spectroscopy, application to problems concerning synthetic dyes ..	206
-transfer processes, operational, further considerations of hank-dyeing machine in light of (Corr) ..	278
Masterbatches, elastomer-silica, wet ..	359
for mass coloration of nylon fibres ..	99
Masterbatching, wet, of carbon black and butyl rubber ..	35
Matting agent in varnish paints, silica filler for use as ..	294
Meat (see Colour, Curing)	
Mercerising, economic recovery of caustic soda in jute, cotton and other vegetable fibres ..	36
technology ..	20
yarn ..	101
Mercury surfaces, adsorption of Methylene Blue at ..	239
Merocyanine and azamerocyanines derived from 2-hydroxy-1-naphthaldehyde and 1-nitroso-2-naphthol ..	317
containing pyrrolo(1,2-a)indolium nucleus ..	357
dyes ..	26, 70, 99, 319, 357, 395
—cyanine, carbocyanine and styryl dyes, intermediates for ..	241
—and <i>p</i> -dialkylaminostyryl dyes derived from 1,2,6,7-dibenzoanthrone ..	354
—hemicyanine, styryl and complex dyes ..	241
—having heterocyclic radical bonded to methine chain for increased light sensitivity of copy paper ..	320
—and intermediates therefor ..	293
—photosensitisers ..	241, 292, 395
—quaternary ..	395
— and symmetrical oxanol dyes ..	395
—sulpho-substituted ..	134
Metachromasia (C) ..	83
Metal flakes, pigment ..	27
inks and paints, improving receptivity of plastic surfaces for ..	252
oxides (see also Coating)	
—acylates useful as colorants and fungicides ..	358
—apparatus for thermal production ..	20
—pigments, plant for producing ..	66
reducing corrosive action of diazonium salt solutions on ..	321
substrates, weather-resistant coating composition for ..	294
Metal-complex dyes, 1:2, concentrated solutions for photographic use ..	133
Metallic fibres as durable antistatic agents ..	29
Metallising cellulose and synthetic-polymer textiles ..	136
chemically, non-metallic substrates ..	327, 328
Metameric indices, comparison, for different light sources ..	404
Methine dyes (see also Basic dyes, Pentamethine dyes) ..	70, 241, 394
for acrylic and modacrylic fibres ..	394
combination, as supersensitiser ..	297
and cyanine dyes ..	25
di-, and intermediates ..	318
with methine linkage attached to 3-position of 5-alkoxycarbonyl-3,4-dioxo-1-aryl-6-thioxopiperidine nucleus ..	318
as photographic sensitizers ..	241, 289
tri-, indole ..	318
—and penta-, antihalation and filter dyes ..	289
Methinecyanine dyes, mixtures with styryl bases as supersensitisers ..	297
mono-, and carbocyanine dyes ..	165
quinolinetriaazatri-, substituted, preparation and properties ..	97
Methyl Red, Sudan III, Aniline Blue, Quinoline Blue or Naphthol Yellow, mixture for use in colour radiography ..	359
Methylene Blue, adsorption at mercury surfaces	239
Methylol compounds, of acrylamide for imparting crease-recovery properties ..	163
—reactions with cellulose, <i>NN</i> -diethylaziridinium chloride as coreactant catalyst for ..	402

Methylol—continued

groups, reactive dyes containing ..	133
phosphorus polymers as flame retardants ..	22
Methylolamides on cotton, steam-curing ..	248
products, water-dispersible ..	23
Methylolated lactams, modifying textiles with ..	251
Metomega chrome dyes for wool dyeing (S) ..	96
Microbial degradation, relation between, protection against and affinity of 2-phenylbenzothiazole derivatives for cellulose ..	193
Microbiocidal agents, naphthoxy salicylanilides and carbanilides as ..	285
quaternary ammonium compounds, synergistic blends ..	22, 130
Microbiological degradation of nylon-cotton blend fabrics ..	249
Microscopy, optical, and textile finishing ..	171
Microwave heating of textiles ..	162
Migration, decorative patterns by ..	204
of disperse dyes, preventing, when dyeing polyester-cellulose blends ..	247
Mildewproof finishes, influence of resins used in, fastness of finish ..	326
Mill, controlled-energy, determination of relative colour dispersions by method based on use ..	244
Milling, ball, comparison with sand grinding in relation to pigment particle size ..	23
flake metal pigment ..	397
printing-ink variable ..	244
properties of wool ..	171
sand- and ball-, comparison of effect on particle size of pigments ..	398
and scouring wool fabrics in dry-cleaning machine ..	246
Mitter rotary-screen printing machines, printing of textiles and floor coverings on ..	324
Mixers, high-speed (Joshua Greaves) ..	19
Modacrylic (see Acrylic, Flame-resistant)	
Mohair (see Shrink-resistant)	
Moisture-vapour transmission, relation to structure of textile fabrics ..	171
yarn, measurement in dyehouse ..	171
Momcolor: new colour-measuring instrument ..	404
Monazo dyes (see also Acid dyes, Azo dyes, Basic dyes, Direct dyes, Disazo dyes, Disperse dyes, Food dyes, Reactive dyes, Solvent dyes, Trisazo dyes) ..	317
from $\epsilon$ -caprolactam ..	392
1:2, cobalt-complex ..	68
derived from substituted 2-aminobenzo-thiazole-3 <i>N</i> -oxides, dyeing properties on various synthetic-polymer fibres (C) ..	309
with dihalogenopyridazone group ..	164
metallised, for nylon ..	287
and polyazo dyes containing polyfluoroalkanol or alkyl ether group ..	99
for polypropylene ..	317
pyrazole, for mass coloration of nylon ..	134
for silver-dye-bleach process ..	168
Monazo pigments ..	99, 133, 354, 392
Mono-olefins, fluorinated, etherifying cellulose and starch with ..	170
Mordants, poly(styrene-maleimide) cationic, for use in silver-dye-bleach material ..	362
Mothproofing agent, evaluation ..	326
with ammonium quaternary compounds ..	326
wool ..	74
Mould prevention in leather, use of 4-nitrophenol for (ICI) ..	161
Moulding and coating compositions, polyester, curable by ultraviolet radiation ..	252
compositions containing inorganic binders, water-repellent agent for coating on ..	285
powders, poly- $\alpha$ -olefin, stabilised ..	327
rendering cellulosic materials amenable to ..	299
Multicolour effect ..	29
Munsell value equation, approximate representations ..	300
value and <i>H</i> <sup>°</sup> scales, adjustment to uniform steps for various background reflectances ..	253

N

Naphthalimide (see Fluorescent brighteners)	
Naphthol Yellow, Sudan III, Aniline Blue, Quinoline Blue or Methyl Red, mixture for use in colour radiography ..	359
Naphthoquinone-imine hair dyes ..	358
Naphthol AS components, substantivity and coupling properties ..	97
Natural dyes and acid dyes, pigments from ..	135
Neonol dyes for nylon fibres (CGY) ..	160
Neoprene, identification ..	253
Network planning ..	208
Nickel-coated flake pigments ..	397
or iron-containing pigments, dispersions ..	135
Nitration of jute, cotton and other vegetable fibres ..	72
Nitrite elastomers, identification ..	253
Nitro dyes for polyesters ..	287
Nitroaminobenzene dyes, stabilisers for ..	194
Nitrocellulose flexographic printing inks ..	28
lacquers, inexpensive, xylene-formaldehyde resins for use in ..	294
—yielding hard moisture-resistant coatings ..	294
Nitrodiphenylamine dyes ..	354
4-Nitrophenol: use for mould prevention in leather (ICI) ..	161
Noise pollution ..	36
Non-woven materials, influence of mechanical properties of binder on textile behaviour ..	74
Novacryl Rubine R (YDC) ..	20
Novanyl Leveller AL, effect on acid dyes on nylon (YDC) ..	161
Nuclear magnetic resonance and mass spectroscopy, application to problems concerning synthetic dyes ..	206
Nutshells, colour-coating ..	167
Nylon (see also Bleaching, Coloration, Degradation, Delustring, Dyeing, Dyeing and finishing, Durable-press, Mass coloration, Polyamide, Printing, Stabilisers, Staining, Stripping, Yellowing)	
adsorption and diffusion behaviour of tannic acid in (P) ..	5
cation-active, water-soluble ..	130
composition for coating and impregnating carpets to improve wearing, piling and fuzzing properties ..	364
containing succinic acid imide as antistatic agent ..	72
cotton and polyester fabrics, burning characteristics, as function of pre-ignition temperature ..	248
-delustring or -pigmenting slurries, aqueous addition of amine to ..	399
dyeing, detection of syntans (Corr) ..	157
-epichlorohydrin resin, influence of pretreatments on shrink-resist finishing of wool with ..	74
—reaction with wool ..	33
fabrics, increasing thermostability ..	33
—woven and knitted, avoiding stripiness in ..	102
fibres, aftertreatment of anionic dye on: effect of backtanning on dyed nylon (P) ..	3
—multicoloured effects on ..	102
—photosensitised oxidation ..	295, 399
—silk-like ..	245
fibrous surface, contoured pattern on, by use of formic acid ..	250
filaments having improved dyeability ..	29
of improved antistatic properties ..	295
of improved substantivity for acid dyes ..	360
melt, mixing pigment dispersion with ..	103
modified, having durable antistatic properties ..	167
modifying dyeing properties ..	29
modifying substantivity for acid and basic dyes ..	245
photosensitive ..	76
poly(acrylic acid) treatment ..	104
and polyester fabrics having improved mechanical properties, water repellency and coating adhesion ..	250
polyurethanes, polyureas and polyurethane-ureas, increasing resistance to solvents and flame ..	250
protecting against peroxy bleaching baths ..	246
raising melting point ..	250

	PAGE
<b>Nylon—continued</b>	
resistant to acid dyes .. .. .	29
staple fibres, finish for .. .. .	353
tannin-treated, dyeing properties of acid dyes on (P) .. .. .	5
— physical properties (P) .. .. .	5
wet-shaped, improving dyeability .. .. .	76
yarns, finish for .. .. .	67
<b>Nylon 6</b> , diffusion of non-ionic penetrants in .. .. .	101
effects of tanning agents on dyeability and physical properties (P) .. .. .	9
fibre, treatment by aqueous suspensions of blocked di-isocyanates .. .. .	322
filaments, effects of washing on stability to light .. .. .	101
and polyester, delustred, polarographic determination of titanium dioxide in .. .. .	328
<b>Nylon 6.6</b> fibres, effect of light and air contaminated with sulphur dioxide on surface .. .. .	245

## O

<b>Obituary notices</b> .. .. .	92, 159, 189, 233, 312, 351
<b>Oil-stain-release polymers</b> .. .. .	316
— stain and water repellency by use of organic fluorocarbons .. .. .	238
<b>Oil-repellent</b> (see also Water-repellent) .. .. .	
finish .. .. .	193
<b>Olefinic copolymer</b> , extrusion-coating with .. .. .	252
<b>Oleoresinous vehicles</b> , pigment compositions for .. .. .	167
<b>Opacity</b> , improved, bonded-fibre fabric having .. .. .	404
<b>Opening</b> , automatic tensionless, of knitted fabrics .. .. .	249
<b>Optical and electron microscopy</b> of photodegraded polyester fibres .. .. .	35
<b>Oxacarboyanine</b> and benzimidazolecarbo-cyanine dyes, solubilised .. .. .	165
<b>1,3,4-Oxadiazole</b> compounds: fluorescent brighteners .. .. .	242
<b>Oxanol dyes</b> , symmetrical .. .. .	395
<b>Oxazine dyes</b> (see Basic dyes) .. .. .	
<b>Oxazoline</b> water-repellent composition .. .. .	22
<b>Oxidation bases</b> , benzimidazole coupling agents for .. .. .	293
— coupling agents for .. .. .	293
— and coupling component, mixture, for hair dyeing .. .. .	293
— on keratinous fibres, coupling agents for use with .. .. .	358
hypochlorite, of cellulose in presence of manganous hydroxide (C) .. .. .	228
<b>Oxonol dyes</b> , pentamethine .. .. .	134
— hemioxonol, benzylidene and cinnamylidene dyes .. .. .	165
<b>Oxygen</b> difluoride, fluorine and hydrofluoric acid, bleaching wood pulp .. .. .	322
<b>Ozone</b> fading of dyed textiles, reducing .. .. .	362
for water and effluent treatment .. .. .	390
<b>Ozonisation</b> of carbon black .. .. .	166

## P

<b>Packages</b> (see also Drying) .. .. .	
cross-wound, effect of density regularity on dye-liquor penetration .. .. .	324
yarn, to be wet processed, axially and radially contractible tubes for .. .. .	352
<b>Pad-bake</b> reaction of cellulose and aqueous solutions of amic acids .. .. .	325
<b>Benninger-Peter CGF</b> .. .. .	315
<b>Padding</b> (see also Dyeing) .. .. .	
fluidic control in .. .. .	295
or printing pastes or solutions containing reactive dyes .. .. .	247
<b>Paint binders</b> , radiation-curable, containing vinyl monomers and hydroxylated polymer reacted with polyisocyanate and hydroxy-alkyl acrylate .. .. .	294
extender, pigmentary urea-formaldehyde particles as .. .. .	135
films, colour changes in, caused by flotation, flocculation and sedimentation of pigments, prevention .. .. .	72

<b>Paint—continued</b>	
films, containing pigment particles scattering light anisotropically, theoretical consideration of reflection of light by .. .. .	254
— containing titania, determination of gloss haze as function of dispersion .. .. .	253
— emulsion-, brightness and opacity .. .. .	28
— significance of dimensions of reflectometers used for measuring gloss .. .. .	300
— water transport through .. .. .	398
literature (Corr) .. .. .	63
production, poly(vinyl acetate) dispersions in spray booths, temporary coating for insides .. .. .	244
<b>Paints</b> (see also Binders, Chalking, Matting, Pigmenting, Tinting, Weathering) .. .. .	
alkyd-based, relation between ion-exchange capacity and corrosion protection efficiency .. .. .	359
— thixotropic .. .. .	294
— non-sag, one-coat, oil-modified .. .. .	321
antiscald .. .. .	244
aqueous, with increased period of drying .. .. .	244
for blackboards and like .. .. .	321
corrosion-resistant, water-based, based on straight-chain alkanolic acid vinyl polymers .. .. .	244
dripless, water-emulsion .. .. .	321
for electrodeposition, methods and apparatus for applying .. .. .	294
emulsion, containing linseed oil, colour stability .. .. .	300
— readily soluble aluminium-carboxymethyl-cellulose for use in distempers and emulsion paints .. .. .	244
flame-retardant and anti-corrosive .. .. .	321
gel-resistant, latex, nongelling titanium dioxide for use in .. .. .	359
gloss, emulsion, based on poly(vinylidene chloride) copolymers .. .. .	28
and inks, identifiable .. .. .	321
— and metals, improving receptivity of plastic surfaces for .. .. .	252
latex, and particle-size parameter .. .. .	28
— titanium dioxide of improved stability in .. .. .	27
linseed-oil, emulsion .. .. .	321
outdoor, rapid test for tint retention and resistance to chalking of titanium dioxide pigments in .. .. .	244
pigmented, aqueous .. .. .	100
— with zinc oxide, durability .. .. .	398
protective, for giving high-strength low-alloy steel weathered appearance .. .. .	244
— for iron .. .. .	244
road .. .. .	321
stain-resistant, water-based .. .. .	321
storage-stable, anticorrosive, containing pigment metals .. .. .	244
thixotropic, non-sag, one-coat, oil-based .. .. .	294
tinted, measuring undertone and effect of dispersion, flocculation and pigment volume concentration .. .. .	244
tinting composition for .. .. .	294
titanium dioxide-pigmented, extended with synthetic sodium aluminosilicate .. .. .	294
treating effluents containing .. .. .	237
water-thinnable, having high degree of reflected gloss and excellent hiding power .. .. .	244
<b>Palanil</b> , Celliton, Basacryl and Acryl dyes on Clevyl T (BASF) .. .. .	94
and Celliton dyes on triacetate (BASF) .. .. .	19
<b>Paper</b> (see also Bleaching, Coating, Drying, Dyeing, Mass coloration, Printing, Pulp, Rotproofing, Size, Sizing) .. .. .	
chromatography, of dispersible fluorescent brighteners .. .. .	253
coated, non-glazed .. .. .	252
— semi-matt finish for .. .. .	327
copy-receiving .. .. .	247
fixing dry powder images on .. .. .	325
high-gloss, high-speed production .. .. .	206
— making, cationic resin emulsions for use in .. .. .	251
pigmented coatings for .. .. .	252
plastic foils having similar properties, pigment concentrate for production .. .. .	170

<b>Paper—continued</b>	
sizing agent for .. .. .	
vacuum-metallised .. .. .	
water-treated, shadow marks on .. .. .	17
<b>Paraffin-wax</b> content of wool knitwear, rapid method of estimating .. .. .	40
fluorinated, as a water-repellent finish .. .. .	31
<b>Pararosaniline</b> , aryl-, sulphonic acid pigments .. .. .	199, 35
<b>Parchmentising</b> of cotton fabrics with sulphuric acid .. .. .	40
<b>Particle-size</b> distribution, analysis .. .. .	25
— apparatus for determination .. .. .	32
parameter and latex paints .. .. .	2
of pigments, determining use of disc centrifuge .. .. .	20
<b>Patina</b> finish for cupreous surfaces .. .. .	29
<b>Pearlescent</b> , agents for rendering liquids and pastes .. .. .	29
<b>Peel R A</b> (Obituary Notice) .. .. .	15
<b>Pegg HTU 15</b> , modified, solvent-dyeing machine (Sy) .. .. .	51
<b>Pelargonic acid</b> as assistant in dyeing nylon .. .. .	29
<b>Pelletising</b> carbon black .. .. .	32
— and powdered colorants, process and apparatus for .. .. .	35
wet-, apparatus, for carbon black .. .. .	39
<b>Pelts</b> (see Drying) .. .. .	
<b>Pens</b> , recorder, ink for .. .. .	13
<b>Pentachlorophenyl</b> laurate, microbiological hydrolysis .. .. .	6
<b>Pentamethine oxonol</b> dyes .. .. .	13
<b>Peracetic acid</b> (see Bleaching) .. .. .	
<b>Peracids</b> , action on wool .. .. .	10
<b>Perchloroethylene</b> (see also Dyeing) .. .. .	32
properties (Sy) .. .. .	50
<b>Permanent Orange FF (FH)</b> .. .. .	16
Yellow DGR (FH) .. .. .	28
Yellow GR 52; Permanent Rubine L7B50; Hostapern Blue B3G50 (FH) .. .. .	28
Yellow GRL (FH) .. .. .	28
<b>Personnel</b> problems as management task .. .. .	19
<b>Perylene</b> comonomers for polyesters and nylon pigments .. .. .	19
<b>Peter-Benninger CGF</b> pad .. .. .	31
<b>Petrol</b> , solvent dyes for .. .. .	6
<b>Pharmaceutical</b> pellets, edible, indelible .. .. .	7
<b>Phenolic</b> compounds, sulphonated-aminoplast, as assistants in leather tanning and dyeing .. .. .	1
<b>Phenols</b> , hindered, for stabilising azo dyes to oxidation .. .. .	28
<b>Phenthiazine</b> type redox compounds, nature of dye-polymer bond in .. .. .	28
<b>p-Phenylenediamines</b> , nitro-, and 4-fluoro-3-nitro-subst. anilines .. .. .	1
<b>Phenylhydrazones</b> , substituted, new method for elimination of water and <i>p</i> -toluenesulphonate ion from .. .. .	35
<b>Phosphate</b> , pyro-, and peroxide, one-step bleaching of wood pulp with .. .. .	28
removal from effluents by treatment with iron oxide .. .. .	19
<b>Phosphazenes</b> , alkoxy-, as flame retardants for rayon .. .. .	19
<b>Phosphazo</b> group, auxochromic effect .. .. .	239, 3
<b>Phosphinic acid</b> , bis(sulphatomethyl)-, for treating cotton textiles .. .. .	10
— halogenoalkyl, for crosslinking cotton .. .. .	10
<b>Phosphonitrilates</b> , halogenated polymer, flame-retardant rayon containing .. .. .	20
<b>Phosphonyl</b> isocyanates as reactive flame-resisting agents .. .. .	
<b>Phosphoramidate</b> , tris(2-chloroethyl)-, exploratory characterisation of cotton cellulose modified with .. .. .	
<b>Phosphorescent</b> composition .. .. .	
<b>Phosphorus</b> amides, mixture for rendering cellulosic fibrous material flame repellent .. .. .	2
— containing polymethine dyes .. .. .	3
removal from effluents .. .. .	
<b>Photochemistry</b> of azo dyes in synthetic-polymer fibres: effect of concentration .. .. .	2
of dyes: general processes and techniques (RP) .. .. .	223, 3

PAGE		PAGE
	<b>Photochromic behaviour of flavanthrone</b> .. 23	
76	<i>cis</i> -1-aryl-2-nitroalkenes .. 357	
76	compositions, of extremely rapid return rate .. 398	
170	— light-stabilised, containing antioxidant .. 198	
	— polymeric, stabilised to ultraviolet radiation .. 167	
404	dihydrodibenzofurans and thiophenes .. 26	
116	material .. 34, 292	
199, 358	9-oxo-2-cyano-2,3(1 <i>H</i> )-xanthenedicarbox- amide compounds .. 356	
402	photoresist imaging .. 32	
253	reactive dyes .. 199	
328	reversibly, polyhalogenated salicylidene anilines .. 131	
28	Schiff-base copolymers .. 320	
207	<b>Photoconductive titanium dioxide</b> .. 321	
294	<b>Photoconductivity (RP)</b> .. 225	
	<b>Photoconductors</b> , organic, heat-unstable organic acid salts of triphenylmethane dyes as sensitisers .. 169	
516	<b>Photocopying material</b> , light-sensitive composition for use in .. 248, 401	
297	<b>Photographic reproduction</b> using titanium dioxide .. 298	
321	use, metal-complex dyes for .. 133	
390	<b>Photographs</b> , coloured, improving fastness to light .. 401	
352	<b>Photolysis</b> , flash, developments in (RP) .. 224	
136	<b>Photo-oxidation</b> of thiazine dyes by <i>p</i> -benzo- quinone with light impulse excitation .. 67	
67	<b>Photoreductions</b> with acetone and glucose in water (C) .. 346	
134	of azo dyes by reducing agents formed upon photo-excitation of simple aliphatic and aromatic compounds (C) .. 342	
104	with benzophenone in alcohols (C) .. 345	
323	with <i>o</i> -chlorobenzoic acid and glucose in water (C) .. 347	
503	with hydrogen peroxide in alcohols (C) .. 345	
161	of xanthene dyes, electron spin resonance study of radical intermediates in .. 239	
282	<b>Photosensitisers</b> , merocyanine dyes .. 292	
7B50;	use of dyes as, evidence that singlet oxygen is not involved .. 354	
282	<b>Photosensitising properties</b> , excellent, hemicyan- ine dyes .. 293	
36	<b>Photosensitive compositions</b> .. 248	
199	— dye-bases containing .. 70	
199	— for use in photocopying .. 401	
315	nylon .. 76	
68	polyacetylenic compounds subject to colour change .. 320	
72	<b>Phototropic compounds</b> .. 292, 320	
	— containing azo modifier .. 166	
76	<b>Phototropy</b> of vat dyes, effect of hydrophobic finishes on .. 316	
285	<b>Phthalocyanine, <math>\alpha</math>-</b> .. 27	
286	$\alpha$ -metal-free .. 166	
24	copper, blended with copper phthalocyanine halide .. 290	
	— free from chlorine .. 243	
193	— resistant to crystal growth .. 319	
193	dyes (see also Direct dyes, Reactive dyes) — azo, for leather .. 290	
239, 317	— cobalt, production <i>in situ</i> .. 400	
	— dichlorotriazino-substituted .. 243	
163	— polymers as .. 319	
164	— water-soluble, for use in photographic materials .. 291	
200	high-purity, preparation for use in xerography leuco-, and photocatalytic material, photo- sensitive copying material comprising .. 247	
23	pigments .. 71, 290	
	— containing silyl groups .. 100	
32	— for mass coloration .. 71	
71	substituted, as dye developers for use in multicolour diffusion-transfer processes .. 243	
238	sulphur condense dye .. 71	
317	for xerography .. 100	
22	<b>Phthalogen dyes in dyeing (FBY)</b> .. 19	
219	<b>Pigment coloration and finishing</b> , combined composition, for colouring plastics .. 99, 170	
223, 352	composition, for dispersion in thermoplastic polymers .. 293	

**Pigment—continued**

— for mass coloration of thermoplastics .. 247
— for oleoresinous vehicles .. 167
— for thermoplastics .. 397
concentrated, for production of plastic foils having properties of paper .. 170
concentrates for colouring acrylic polymers dispersion, mixing with nylon melt .. 320
dyeings and prints, binder-containing, on fibrous materials, reducing dirt adsorption floculation and dispersion volume concen- tration, measuring undertone of tinted paint and effect .. 244
grade, salt grinding of colorants to .. 359
metal flakes .. 27
metals, storage-stable anticorrosive paints containing .. 244
milling, flake metal .. 397
particles scattering light anisotropically, theoretical consideration of reflection of light by paint film .. 254
preparations, readily dispersed in organic media .. 27
— for use in non-aqueous systems .. 320
<b>Pigmentary properties</b> of anatase or rutile titanium dioxide, improving .. 243
urea-formaldehyde particles as paint extender .. 135
<b>Pigmenting</b> , effect on technical properties of paints .. 294
high-molecular-weight organic compounds, preparations for .. 243
vinyl films, preparation for .. 34
<b>Pigments</b> (see also Dispensing, Dyeing, Floculation, Flotation, Mass coloration, Sedimenta- tion, Weathering)
from acid and natural dyes .. 135
aluminum, developments in .. 354
anthraquinone .. 165, 395
anti-corrosion .. 135
application to wool by resin bonding (C) .. 145
arylarasosaniline sulphonic acid .. 199, 358
azo, acridone .. 133
— containing imide groups .. 133
— X-ray diffraction data for (Corr) .. 120
BASF, new nomenclature for, and BASF pigment dispersions (BASF) .. 281
binding, to glass-fibre fabric .. 294
ceramic .. 135
— based on silica and zirconia .. 293
— based on zirconium and iron .. 397
— pink .. 293
comparison of effect of sand- and ball-milling on particle size .. 23, 398
1-cyano-2,3-phthaloyl-7,8-benzopyrrocoline determining particle size by use of disc centrifuge .. 207
dibenzothiazino(2,3- <i>b'</i> :3',2'- <i>d'</i> )pyrrole .. 198
4,11-dichloroquinacridone .. 357
disazo .. 69, 196, 318
— metallised, for colouring polymers .. 318
— for photoelectrophoretic imaging .. 196
— for printing inks .. 355
dispersed, flushing from aqueous to non- aqueous media .. 100
and dyes, anthraquinone .. 165
fillers, binders for, aqueous dispersions of synthetic resins resistant to saponification fluorescent .. 294
and fluorescent brighteners, <i>o</i> -amino granulated .. 358
and hard resins, dispersions .. 320
with imide groups .. 244
important to paint industry, synthetic silicas inorganic, flake .. 71, 135
— improving pigmentary properties .. 397
iron-chromium oxide, black .. 293
iron- or nickel-containing, dispersions .. 135, 321
isoindoline, transparent .. 134
lead chromate, stabilised .. 27
metal oxide, having improved durability and gloss retention .. 293
— plant for producing .. 66
monoazo .. 99, 133, 354, 392

**Pigments—continued**

nacreous and interference, instrumental study of optical characteristics .. 194
naphthylazo- $\alpha$ -hydroxynaphthoic acid .. 356
naphthyrindione .. 198
nickel-coated flake .. 397
4-nitrobenzenazo-2',5'-dimethoxyacetoacet- anilide .. 355
nonfloating .. 197
organic, influence of particle-size distribution on physical properties and fastness to light for paper .. 27
— coprecipitated calcium hydrogen phosphate and calcium sulphate dihydrate .. 390
— improved clays for .. 398
perylene .. 199
phthalimidoquinophthalone .. 198
phthalocyanine .. 71, 290
— containing silyl groups .. 100
— for mass coloration .. 71
for printing inks (BASF) .. 280
solubility parameters applied to sedimentation volumes .. 28
stable dispersions, in acrylic polymers .. 29
titanium-alumina, co-oxidised, fade-resistant, opacifying .. 293
transparent iron oxide .. 321
uniform silica .. 202
use in dyehouse .. 359
white, comprising hydrated hydrogen phos- phate and hydrated sulphate of alkaline- earth metal .. 293
— for paper-coating compositions, zinc metatitanate .. 135
yellow, inorganic .. 206
<b>Pile fabrics</b> , lustrous polypropylene .. 364
<b>Pilling</b> , wearing and fuzzing properties, nylon composition for coating and impregnating carpets to improve .. 131
<b>Piperazines</b> , diazophenyl-, for diazotype material .. 208
<b>Planning</b> , network .. 251
Plastic-coated knitted fabric .. 170
— coated wallpaper, making .. 170
foils having properties of paper, pigment concentrate for production .. 170
surfaces, improving receptivity for paints, inks and metals .. 252
— rendering dye receptive .. 252
<b>Plasticisers</b> , surfactants and drying agents .. 67
<b>Plastics</b> (see also Coating, Coloration, Mass coloration, Stabilising)
markings on, visible only under ultraviolet radiation .. 294
scratch-resistant coatings for .. 170
transparent, method and apparatus for evaluating content of ultraviolet absorber treating, to improve receptivity to and adhesion of ink .. 170
<b>Polarographic determination</b> of titanium dioxide in delustrated poly(ethylene terephthalate) and nylon 6 .. 328
<b>Pollution control</b> .. 316
— in pigment printing .. 237
<b>Polyacetylenic compounds</b> , photosensitive, subject to colour change .. 320
<b>Polyacrylamide</b> -based flocculant .. 163
floculants, flocculating power and influence on electrokinetic potential .. 285
<b>Poly(acrylic acid)</b> treatment of nylon .. 104
<b>Polyacrylonitrile</b> (see also Acrylic, Acrylonitrile) comonomers used in production (C) .. 150
<b>Polyamide</b> and synthetic-polymer fibres, natural, normally substantive to acid dyes, resist for <b>Polycarbonates</b> , coloured .. 245
<b>Polyazo dyes</b> (see Acid dyes, Solvent dyes)
<b>Polycaprolactam</b> (see Stabilising)
<b>Polycarbonates</b> (see also Dyeing)
coloured, synthesis .. 76
pigmented, stable to heat, light and discolora- tion .. 252
surfaces, formation of urethane units on .. 363
<b>Polychloroethylene</b> (see Stabilising)

	PAGE		PAGE		PAGE
<b>Polychromatic</b> (see Dyeing)		<b>Polymers—continued</b>		<b>Poly(vinyl chloride)</b> (see also Stabilisers)	
<b>Polyester</b> (see also Antisoil, Bleaching, Crease recovery, Dyeing, Dyeing and Finishing, Dyeing or printing, Finishing, Grafting, Pretreatment, Scouring, Setting, Singeing, Stain-release, Stripping, Weathering)		with quaternary ammonium groups as mordants for acid dyes .. .. .	163	fibres, mass-coloured, effects of carbon black on properties .. .. .	400
basic-dyeable, containing metal salt of cycloalkyl sulphonate .. .. .	399	thermosetting, water-soluble .. .. .	164	identification .. .. .	253
and cellulose triacetate, application of azoic dyes to .. .. .	73	<b>Polymethine dyes</b> , phosphorus-containing .. .. .	317	ink for fabrics, plastisol high-molecular-weight .. .. .	294
compositions, stabilised .. .. .	34	<b>ED Polymon Red 2B (ICI)</b> .. .. .	95	polyolefins and cellulose esters, ultraviolet absorbers for .. .. .	391
-cotton blend stretch fabrics .. .. .	251	<b>Poly-<math>\alpha</math>-olefin</b> moulding powders, stabilised .. .. .	327	<b>Polyvinyl coating compositions</b> .. .. .	28
cotton and nylon fabrics, burning characteristics, as function of pre-ignition temperature .. .. .	248	<b>Polyolefin</b> (see also Dyeing, Stabilisers, Stabilising)		<b>Polyvinylamine</b> derivatives, antistatic properties .. .. .	390
fabrics, warp- and weft-knitted .. .. .	399	cellulose esters and poly(vinyl chloride), ultraviolet absorbers for .. .. .	391	<b>Poly(vinylidene chloride)</b> copolymers, gloss emulsion paints based on .. .. .	28
fibres, frosting of fabrics containing .. .. .	208	containing combination of antioxidants and ultraviolet absorbers .. .. .	29	<b>Powder</b> , method and apparatus for applying to travelling web .. .. .	352
—improving handle of fabrics containing .. .. .	251	dyeable, graft copolymers, with vinyl monomers .. .. .	245	<b>Precipitation and flocculation</b> , chemical, of aqueous wastes .. .. .	163
—modified, substantive to acid dyes .. .. .	167	fibres, containing nitrogenous dye receptor, preventing regression in dyeability and dyeing adjuvants capable of being partially removed by solubilisation in water .. .. .	245	<b>Preparation and bleaching of textiles from non-polar solvents</b> .. .. .	72
—photodegraded, optical and electron microscopy .. .. .	35	—dyeable .. .. .	399	dyeing and finishing, of cloth .. .. .	400
film, improving adhesion to .. .. .	76	—and films, dyeable .. .. .	29	—solvent .. .. .	295
fluorinated, oil- and water-repellent finishes for improving dyeability .. .. .	245, 399	—weathering resistance of coloured ropes made from .. .. .	171	and dyeing of texturised polyester yarn and fabric .. .. .	203
of increased substantivity for basic dyes .. .. .	360	improving adhesion of ink to .. .. .	169	solvent, Markal process for .. .. .	101
materials, dyed, removal of carrier residues from .. .. .	203	and polyester dyeable with acid dyes .. .. .	245	<b>Press</b> , flat-bed, for use in transfer printing (Sy) garment .. .. .	489
and nylon 6, delustred, polarographic determination of titanium dioxide in .. .. .	328	and polyester yarns containing basic resins, modifying, by treatment with acid anhydrides .. .. .	167	<b>Pretreatment</b> and dyeing of polyester-cotton fabrics .. .. .	191
and nylon fabrics having improved mechanical properties, water repellency and coating adhesion .. .. .	250	<b>Polyphenylene ether</b> (see also Stabilisers)		fabrics .. .. .	201
and polyolefin yarns containing basic resins, modifying, by treatment with acid anhydrides .. .. .	167	fibres, insolubilising .. .. .	295	and dyeing of yarns and fabrics from textured polyester filaments .. .. .	102
and polyolefins dyeable with acid dyes .. .. .	245	<b>Polypivalolactone</b> fibres (see Crease recovery)		of synthetic-polymer fibres and blends .. .. .	203
substantive to basic dyes .. .. .	399	<b>Polypropylene</b> (see also Dyeing, Mass coloration, Printing, Stabilisers, Stabilising)		<b>Primazin dyes (BASF)</b> .. .. .	18
sulphonate-containing, substantive to basic dyes .. .. .	136	amorphous, transition and rate of sublimation of disperse dyes out of .. .. .	102	—for printing (BASF) .. .. .	95
surfactants, non-ionic .. .. .	285	composition, dyeable .. .. .	167	<b>Primers</b> , chemical, physical, and thermal behaviour of active chromate pigments in .. .. .	294
water-dissipatable, as sizes readily removed by scouring .. .. .	353	crystalline, improving dyeability .. .. .	360	for dry electrostatic coating .. .. .	294
weft, imparting stretchability to fabric having .. .. .	327	fibres, modified .. .. .	323	<b>Print-dry</b> method of application of reactive dyes .. .. .	31
<b>Polyesteramides</b> from linseed and soybean oils, colour stability .. .. .	27	pile fabrics, lustrous .. .. .	206	<b>Printing</b> (see also Dyeing, Dyeing or printing, Fixation, Yellowing)	
<b>Polyethylene</b> dispersions, addition to aqueous flexographic inks to improve resistance to abrasion and chafing .. .. .	294	<b>Polyisilicic acid</b> , coating composition containing .. .. .	294	acrylic fibres with basic dyes .. .. .	73
polyamines, modification of poly(vinyl alcohol) fibres with, to improve dyeability .. .. .	29	<b>Polysiloxane</b> , organo-, compositions for coating paper and fibrous materials .. .. .	353	African styles in .. .. .	31, 324
waxes, printing inks containing .. .. .	294	radiation-curable, unsaturated, as paint binders .. .. .	398	on anodised aluminium .. .. .	169
<b>Polyethylenimine</b> and human hair, interaction between .. .. .	322	<b>Polystyrene</b> (see also Colouring)		behaviour, physical and chemical properties of reactive dyes and effect on (P) .. .. .	371
<b>Polymer-dye</b> bond, nature in phenothiazine-type redox compounds .. .. .	286	molecular weight, influence of addition of azo solvent dyes to polymerisation system .. .. .	286	bleaching, dyeing and finishing plants, complete, establishment (Sy) .. .. .	422
surfaces, hydrophilic, via radiation-chemical treatments .. .. .	103	<b>Polyureas</b> , nylon, polyurethanes, and polyurethaneureas, increasing resistance to solvents and flame .. .. .	250	carpet, developments in .. .. .	74, 103
<b>Polymeric dyes</b> .. .. .	198, 240	<b>Polyurethane</b> (see also Bonding, Coating, Degradation, Drying, Dyeing, Laminating, Printing)		cellulose triacetate (ICI) .. .. .	314
<b>Polymerisable</b> azo disperse dyes .. .. .	195	-coated fabric, bubble-free .. .. .	76	and coating, web-, method and apparatus .. .. .	389
<b>Polymerisation</b> of acrylic compounds on cotton fabrics .. .. .	205	—as leather substitute .. .. .	251	colour, with aqueous inks .. .. .	31
graft, on cellulose with suppression of homopolymer formation .. .. .	206	compositions, thixotropic .. .. .	28	with disperse dyes on synthetic-polymer and triacetate textiles, salicylanilide as carrier for economical, of cellulosic and synthetic-polymer fabrics .. .. .	297
—on wool without affecting aesthetic properties .. .. .	75	elastomers, identification .. .. .	253	electrostatic flock, optimum drying conditions of polyurethane binder used in .. .. .	325
interfacial-, process, shrink-resisting of wool tops by .. .. .	104	—in textile finishing .. .. .	104	epoxy coatings on heat-resistant substrate .. .. .	298
<b>Polymers</b> (see also Coating, Coloration, Cross-linking, Degradation, Mass coloration, Stabilising)		foam, leather substitute based on .. .. .	170	fabric, current use of thickeners in .. .. .	103
condensation, formation in or on fibres .. .. .	404	foamback .. .. .	33	industry in Europe .. .. .	362
containing <i>N</i> -cyanomine, <i>N</i> -cyanoozidine and cyanamide substituents .. .. .	200	and isocyanate resins in textile coating lacquers, containing low-viscosity cellulose acetobutyrate as levelling agents .. .. .	362	inks .. .. .	28
coupler and chromogen-bonded .. .. .	292	—two-component, having excellent fastness of colour and gloss and excellent weather resistance .. .. .	321	—chromogenic .. .. .	359
dispersing agents and wetting agents, water-soluble, influence on stability of azo disperse dyes .. .. .	286	nylon, polyureas and polyurethaneureas, increasing resistance to solvents and flame for textile coating, constitution and properties .. .. .	250	—containing polyethylene waxes .. .. .	294
graft, as paper size .. .. .	170	<b>Polyurethaneureas</b> , nylon, polyurethanes and polyureas, increasing resistance to solvents and flame .. .. .	250	—flexographic .. .. .	28
mass-coloured .. .. .	73	<b>Poly(vinyl acetate)</b> dispersions in paint production .. .. .	398	—solubility-parameter concept as aid in formulation .. .. .	72
oil-stain-release .. .. .	316	<b>Poly(vinyl alcohol)</b> , chemical modification .. .. .	250, 327	—heat-setting, solvent-free .. .. .	321
phthalocyanine dye .. .. .	319	effect on textile finishes .. .. .	205	—and lacquers, cellulose .. .. .	294
pigmented, stabilised against deterioration by light .. .. .	34	fibres, chemical embossing of seersucker or crepe finish on .. .. .	206	—mileage, and tristimulus values of prints .. .. .	404
		—modification, by polyethylene polyamines to improve dyeability .. .. .	29	—nitrocellulose, flexographic .. .. .	28
		and starch bound to cellulose by treatment with $\beta$ -oxyethyl sulphones .. .. .	206	—for polymer surfaces, glass and regenerated cellulose .. .. .	398
				—for silicone paper .. .. .	398
				—soluble high-melting dicyclopentadiene polymers for use in .. .. .	294
				—for transfer printing .. .. .	247
				—variables, milling .. .. .	244
				—vehicle, heat-set .. .. .	398
				machine, for fabrics .. .. .	389
				—rotary-screen .. .. .	96
				mercerised cotton with reactive dyes .. .. .	297
				nickel-modified polypropylene for indoor use .. .. .	31
				nylon carpets .. .. .	31
				pastes, and dye-liquors, increasing colour yield .. .. .	361



PAGE		PAGE		PAGE		PAGE	
	<b>Printing—continued</b>		<b>Q</b>		<b>Reactive dyes—continued</b>		
400	pastes, for fibrous materials .. ..	103	<b>Qiana</b> (see Dyeing)		phenylazopyrazole .. ..	288	
253	— or padding solutions containing reactive		<b>Quality control in bleachworks</b> .. ..	72	with phenylrolylenylmethyl groups .. ..	70	
294	dyes .. ..	247	production, abridged colorimetry for .. ..	300	photochromic .. ..	199	
391	— textile .. ..	362	and test method programmes for bonded and		phthalocyanine .. ..	27, 100, 243, 291	
28	— thickeners for .. ..	67, 401	laminated apparel fabrics .. ..	171	— azo, containing $\beta$ -hydroxyethyl sulphone		
390	pigment, with oil-phase and water-phase		<b>Quinacridone and derivatives</b> .. ..	394	sulphuric acid ester, vinyl sulphone or		
28	systems .. ..	247	2,6-dichloro-, crystals, morphology and		sulphonylurea groups .. ..	166	
352	— pastes, binders for .. ..	67	structure .. ..	391	print-dry method of application .. ..	31	
163	— pollution control in .. ..	237	4,11-dichloro-, pigments .. ..	357	printing pastes or padding solutions containing	247	
72	— softener for .. ..	74	6,13-dihydro-, oxidation .. ..	394	with pteridine rings .. ..	23	
400	polyester-cellulosic blend fabrics .. ..	325	as electrically photosensitive particles in		quinoxaline, for cellulose .. ..	356	
295	— with paste containing reactive dye and		photoelectrophoretic imaging .. ..	74	study of reactions with wool under industrial		
102	resin-bonded pigment .. ..	297	oxidising dihydroquinones to .. ..	70	dyeing conditions (P) .. ..	181	
203	properties and rheology .. ..	297	e-type .. ..	394	synthesis and evaluation of dyes containing		
101	rotary-screen, economy and versatility .. ..	204	<b>Quinazoline</b> azo dyes, standard heats and		monochloropyrimidinium and monomethyl-		
489	— and flat-screen, machine for .. ..	20	standard entropies of dyeing (Corr) .. ..	348	thiopyrimidinium systems .. ..	286	
191	screen .. ..	192	cationic dyes for acrylic fibres .. ..	97	triazine, for cellulose .. ..	357	
201	— formes, light-sensitive material for pro-		dye developers .. ..	97	vinylsulphone .. ..	317	
102	ducing .. ..	297	<b>Quinoline Blue, Sudan III, Aniline Blue, Naph-</b>		for wool, $\alpha$ -bromoanthraquinone derivatives		
203	— rotary, mounting .. ..	20	thol Yellow or Methyl Red, mixture for use		and quinizarin-2-sulphonic acid and <i>o</i> -		
18	sheet, electrostatic .. ..	74	in colour radiography .. ..	359	bromo- <i>o'</i> -hydroxyazo dyes .. ..	194	
95	spray-, machine, control for nozzles .. ..	20	<b>Quinomerocyanines</b> : on derivatives of isoxazolone	23	on wool, dye-fibre bond stabilities .. ..	361	
294	strips by copper rollers .. ..	204	<b>Quinophthalone</b> disperse dyes .. ..	99	<b>Recipe</b> prediction, instrumental .. ..	35	
294	sublimation, of raschel-knitted fabrics .. ..	401	<b>Quinoxaline dyes</b> (see Reactive dyes)		<b>Recording, electrographic, colour-forming agent</b>		
31	synthetic-polymer materials .. ..	103			for .. ..	359	
31	textile, bar-marks in .. ..	204			element and composition, heat-sensitive	74	
31	— and floor coverings on Mitter rotary-				material, coating composition for .. ..	298	
31	screen printing machines .. ..	324			— heat-sensitive .. ..	298	
31	thermal, adhesive ink for .. ..	398			— light-sensitive mixture for .. ..	31	
31	thermoplastic, electromagnetic bonding .. ..	74			— pressure-sensitive .. ..	247, 325	
31	tops, use of alkylamides of fatty acids for .. ..	103			paper, colour oscillograph .. ..	298, 320	
31	transfer .. ..	204, 247, 297			— pressure-sensitive, colour former for .. ..	131	
31	— with fluorescent brighteners .. ..	401			photochemical, using hexacyanoferrate(III) ions	31	
31	— vapour phase (Sy) .. ..	488			sheet, pressure-sensitive .. ..	136	
31	vacuum, screen .. ..	401			<b>Reducing agents</b> .. ..	67	
31	<b>Processing aids, residual, on synthetic-polymer</b>				boron-containing polyquaternary ammonium	285	
31	fibres, identification .. ..	208			formed on photo-excitation of simple aliphatic		
31	— textile and auxiliary products (ICI) .. ..	282			and aromatic compounds, photoreduction		
31	developments, effects on effluent treatment .. ..	21			of azo dyes by .. ..	342	
31	irradiation, of textiles .. ..	248			inhibiting formation of odour in wool treated		
31	knitted goods .. ..	203			with .. ..	403	
31	solvent .. ..	32, 248, (Sy) 408			in vat-dyeing processes .. ..	73	
31	textile, use and conservation of water in (P) .. ..	137			<b>Reflectance</b> of dyed fabrics with anisotropic		
31	tyre-rord fabric .. ..	162			scattering .. ..	374	
31	wet, of blends containing Anim/8 elastomeric				standards, barium sulphate .. ..	172	
31	fibre .. ..	361			<b>Reflectometers</b> used for measuring gloss of paint		
31	— and dyeing of hides .. ..	389			films, significance of dimensions .. ..	300	
31	<b>Procion dyes: cold pad-batch application to</b>				<b>Relaxing fabric webs</b> .. ..	104	
31	wool fabric by IWS method (ICI) .. ..	95			<b>Remazol dyes, in printing (FH) .. ..</b>	161	
31	— on cotton: fastness to sea water (ICI) .. ..	161			— in two-phase wet fixation process (FH) .. ..	161	
31	— pad (alkali)-print process (ICI) .. ..	314			<b>Reproduction, photographic, using titanium</b>		
31	— printing furnishing fabrics (ICI) .. ..	314			dioxide .. ..	298, 320	
31	— in textile printing: development by baking				process, negative-working diazosulphonate	247	
31	(dry heat) (ICI) .. ..	314			<b>Resin bonding, application of pigments to wool</b>		
31	H-E dyes (ICI) .. ..	161			by (C) .. ..	145	
31	M and Procion H dyes: pad-batch (cold)				-treated textiles, softener for .. ..	391	
31	process for dyeing cellulosic fibres (ICI) .. ..	314			treatments to improve crease recovery of wool		
31	Supra Yellow H-8GP (ICI) .. ..	282			fabrics .. ..	402	
31	Yellow HG and H-7G (ICI) .. ..	282			<b>Resinous sheet, multicoloured .. ..</b>	34	
31	Yellow M-8G (ICI) .. ..	282			<b>Resins</b> (see also Bonding, Coating, Stabilisers,		
31	<b>Proteins</b> (see Grafting, Keratin, Silk, Wool)				Stabilising)		
31	<b>Pteridine rings, reactive dyes with .. ..</b>	23			basic, polyester and polyolefin yarns con-		
31	<b>Pudsey project</b> (Sy) .. ..	482			taining, modifying by treatment with acid		
31	<b>Pullovers</b> (see Dyeing and finishing)				anhydrides .. ..	167	
31	<b>Pulp</b> (see also Bleaching)				cationic and isocyanate, paper size containing	206	
31	spruce bisulphite, light-absorbing properties				and colorant, spherical, xerographic toner		
31	<b>Pumps, centrifugal, for heating and industrial</b>				particles containing .. ..	359	
31	applications (Crane Ltd Fluid Control Div.)	160			controlled application, emulsion-polymerised		
31	D-range and G-range (Crane Ltd Fluid Control				under alkaline conditions .. ..	249	
31	Div.) .. ..	160			developments and applications to textile		
31	<b>Pyrazoline</b> (see Fluorescent brighteners)				support fabrics by means of transfer system		
31	<b>Pyrazolone</b> (see Basic dyes, Colour couplers)				and control of quality .. ..	362	
31	<b>Pyrazolylazo dyes, quaternised .. ..</b>	318			finishing composition, stable .. ..	22	
31	<b>Pyrene and fluoranthene as fluorescent tracing</b>				hard, dispersions and pigments .. ..	244	
31	agents .. ..	398			with strain-resistant topcoat .. ..	35	
31	<b>Pyridine, 2,3-dihydroxy-, as coupling component</b>				used in mildewproof finishes, influence on		
31	<b>Pyrimidine azo dyes for acrylic fibres .. ..</b>	287			fastness of finish .. ..	326	
31	<b>Pyrococline, 1-cyano-2,3-phthaloyl-7,8-benzo-,</b>				xylene-formaldehyde, inexpensive, for use in		
31	pigments .. ..	397			nitrocellulose lacquers .. ..	294	
31	<b>Prograde process .. ..</b>	200			<b>Resist H (FH) .. ..</b>	161	
31					<b>Resolin dyes in direct printing on polyester fibre</b>		
31					fabrics (FBs) .. ..	314	

	PAGE		PAGE		PAGE
Resorcinol derivatives as coupling components ..	290	Rotadyl (John Jeffries) ..	95	Setting—continued	
Retting (see Bleaching)		Rotproofing agents, 3,4-dichlorocoumarin ..	22	steam (P) ..	39
Reviews of Books (the names of reviewers are given in <i>italics</i> )		— diphenylketone ..	238	synthetic-polymer fabrics ..	40
Chemistry of Synthetic Dyes Volume 3 Edited by K Venkataraman ( <i>W Bradley</i> ) ..	65	— for paper ..	238	Settling and flocculant aid for treating effluents ..	163
Chemistry of Synthetic Dyes Volume 4 Edited by K Venkataraman ( <i>G Hallas</i> ) ..	279	and antiseptic agents, arylguanamines as ..	286	Sewage treatment ..	66
Computer Technology in Textiles ( <i>P G Noble</i> ) ..	17	Rubber (see also Masterbatching)		— apparatus ..	66
Cotton Modification with Oxiranes (Epoxides) by J B McKelvey ( <i>G P Pearson</i> ) ..	280	natural, and polyisoprene, and mixtures ..	253	Sewing problems in wet and dry finishing of woven and knitted fabrics ..	402
Creaseproofing Textiles Edited by M W Ranney ( <i>E S Goodall</i> ) ..	66	panacril, identification ..	253	Sheet material, continuous, heat treatment ..	284
Critical Micelle Concentrations of Aqueous Surfactant Systems by P Mukerjee and K J Mysels ( <i>E S Goodall</i> ) ..	313	Rubbing, colour fastness, of carpets, draft test procedure for determination ( <i>FTCC</i> ) ..	155	— suede-like ..	251, 352
Dry Cleaning by A E Johnson ( <i>G P Pearson</i> ) ..	313	— of dyed rayon sausage casing, improving ..	297	water-vapour-permeable, flexible ..	327
Dyeing and Finishing Knitted Goods by D Haigh ( <i>W Furness</i> ) ..	94	— tester, <i>SDC (FTCC)</i> ..	156	Shirley colour monitor ( <i>Sy</i> ) ..	451
Elastomeric Fibres By R Mcredith ( <i>G P Pearson</i> ) ..	280			digital colorimeter ( <i>Sy</i> ) ..	451
Essential Fibre Chemistry by M E Carter ( <i>R S Asquith</i> ) ..	279			Shrinkage in dry cleaning, development of laboratory test for evaluation ..	29
Experiments in Textile and Fibre Chemistry By C Earland and D J Raven ( <i>J M Woodhouse</i> ) ..	236			problems of minimising by decatizing or sanforising ..	191
Farbbuch Grundlagen der Pflanzenfarberei auf Wolle By E Spränger ( <i>C O Clark</i> ) ..	122			in steam as measure of degree of setting ..	207
Fibre-Reactive Dyes By F W Beech ( <i>A Johnson</i> ) ..	65			in webs passing through compressive-shrinking machine, gauge for measuring ..	191
Fireproofing By P Thiery ( <i>A P Lockett</i> ) ..	279			Shrinking, compressive, dampening cloth before ..	315
Fluorescent Whitening Agents By A K Sarkar ( <i>C O Clark</i> ) ..	313			— machine ..	21
Furskin Processing By H Kaplan ( <i>J L Stoves</i> ) ..	236			— gauge for measuring shrinkages in webs passing through ..	191
Introducing Dyeing and Finishing By B Ash and A Dyson ( <i>C B Stevens</i> ) ..	65			— rubber sleeve for ..	315
Introduction to Textiles By E E Stout ( <i>E S Goodall</i> ) ..	65			Shrink-resistant finish for wool ..	75, 250
Journal 1970 Bradford Textile Society Edited by B Claughton and A Gray ( <i>C O Clark</i> ) ..	122			— wool-keratine ..	402
Laboratory Preparation for Macromolecular Chemistry By E L McCaffery ( <i>G P Pearson</i> ) ..	160			finishing of wool with nylon-epichlorohydrin resin, influence of pretreatments on ..	74
Leitfaden der Farbstoffchemie By P Rys and H Zollinger ( <i>H E Nursten</i> ) ..	94			treatment of wool ..	298
Man-made Fibres By R W Moncrieff ( <i>G P Pearson</i> ) ..	159			wool and mohair, corona-discharge method of producing, pilot-scale top-treatment reactor ..	33
Man-made Fibres in the U.K. Compiled by P Hallam ( <i>W S Boston</i> ) ..	280			Shrink resisting and chemical treatments, effects on epicuticle of wool ..	249
Mothproofing of Wool By J R McPhee ( <i>C O Clark</i> ) ..	313			wool ..	250
Naturally Occurring Quinones By R H Thomson ( <i>R L Edwards</i> ) ..	160			— tops by interfacial-polymerisation process ..	104
Not from Trees Alone (The British Association of Synthetic Rubber Manufacturers) ( <i>E S Goodall</i> ) ..	18			Sieve drums, drying webs on ..	192
Optical Instruments and Techniques Edited by J Holme Dickson ( <i>E S Goodall</i> ) ..	66			Sighting colorants ..	242
Photochemistry By R P Wayne ( <i>G S Egerton</i> ) ..	351			Silane, trialkoxy-, aminoethylaminopropyl, textiles coated with and dyed ..	204
Phthalocyanine Technology By Y L Meltzer ( <i>D Patterson</i> ) ..	122			Silcolapse silicone antifoam emulsions ( <i>ICI</i> ) ..	282
Recommendations for Marketing and Sales Training (Cotton and Allied Textiles Industry Training Board) ( <i>E S Goodall</i> ) ..	18			5005 (silicone antifoam) for jet dyeing ( <i>ICI</i> ) ..	282
Recommendations for the Training of Technical Trainees (Cotton and Allied Textiles Industry Training Board) ( <i>E S Goodall</i> ) ..	18			Silica, diatomaceous, as flattening agent ..	243
Synthetic Dyes in Biology, Medicine and Chemistry By E Gurr ( <i>A Johnson</i> ) ..	280			— elastomer wet masterbatches ..	359
Tables of Electronic Spectra of Anthraquinone and its Derivatives By V Ya Faen ( <i>F Jones</i> ) ..	190			filler for use as matting agent in varnish paints ..	294
Textile Printing By L W C Miles ( <i>D M Nunn</i> ) ..	280			pigment ..	243
Thermoforming Edited by H F Mark, N G Gaylord and N M Bikales ( <i>W S Boston</i> ) ..	280			— uniform ..	321
Water Treatment By G V James ( <i>W A Straw</i> ) ..	351			structurally modified ..	321
Rhodacyanine dyes ..	196			synthetic: important pigments for paint industry ..	317
Road-marking composition, quick-drying ..	294			wet, mechanically modifying to reduce free-water retentivity ..	293
Roller for conveying webs ..	20			and zinc oxide, ceramic pigments based on ..	293
nip, stripping webs from ..	20			— for paper systems, titanium dioxide treated with ..	293
seal for web high-temperature steamer ..	20			Silicon compounds as sizes ..	23
Roofing granules, colour-coated ..	135			N,N-disubstituted, aminoalkoxyalkyl-, compounds ..	23
Ropes, coloured, made from polyolefin fibres, weathering resistance ..	171			Silicone treatment of titania ..	287
Rosin anhydride, aqueous dispersion, for internal or external sizing of paper ..	251			Silk, chemistry and structure ..	245
Rot resistance of thiophen derivatives of cotton and weather resistance, imparting to cotton fabrics ..	248			Indian, wild: effect of esterification of Tussar silk on dyeing behaviour ..	322
	32			-like nylon fibres ..	245
				and wool, increasing strength ..	250
				Siloxane, organo-, oligomers, reactions on surface of fibres ..	169
				Silver-dye-bleach process, azo dyes for ..	393
				— disazo dyes for ..	289
				— magenta azo dyes for ..	240
				— monoazo dyes for ..	168
				Simulation, computer, of dyehouse processes ( <i>AC</i> ) ..	54
				program, dyehouse, and automation ( <i>Corr</i> ) ..	61
				Singeing of polyester-wool fabrics ..	72
				and wet treatment of textiles ..	352
				Size, heat- and humidity-resistant, for polyolefin yarns ..	238
				of low migration, low tension and complete burn-off on glass fibres ..	285
				non-aqueous, application and removal ..	363

PAGE		PAGE		PAGE		PAGE	
	<i>Size—continued</i>		<b>Sodium aluminosilicate, synthetic, titanium dioxide-pigmented paints extended with</b> .. 294		<b>Spandex fibres, finish for imparting durable fastness to gas-fume fading to</b> .. 316		
39	paper, containing isocyanate and cationic resin .. 206		chlorite ( <i>see</i> Bleaching)		<b>Spectroscopy and computer dyeing</b> .. 102		
404	— graft polymer as .. 170		cupric pyrophosphate in heat- or pressure-sensitive copying sheets .. 325		infrared, applications in investigations of cotton .. 104		
163	polymeric, for filament yarns .. 245		dithionite, aqueous, decomposition .. 390		internal reflection, application to quantitative analysis of mixed fibres .. 104		
66	readily removed by scouring, water-dispersible polyesters as .. 353		— kinetics of decomposition .. 96		<b>Spots, removing from fabrics</b> .. 30		
66	silicon compounds .. 23		— reaction mechanism for decomposition .. 97		<b>Spray dyeing (<i>see</i> Dyeing)</b>		
402	textile .. 316		dodecyl sulphate (SDS) solutions and $\zeta$ -potentials of natural and synthetic-polymer fibres in viscosity of SDS above critical micelle concentration (c.m.c.) .. 72		<b>Spray printing (<i>see</i> Printing)</b>		
251, 352	vinyl acetate-acrylamide copolymer, partially saponified .. 353		hydroxide ( <i>see also</i> Bleaching)		<b>Stabilisers (<i>see also</i> Absorbers)</b>		
327	water-dispersible, methylolamide products .. 23		— economic recovery in mercerising .. 360		for halogen-containing resins .. 34		
451	<b>Sizing agent for paper</b> .. 76		— and sodium hypochlorite concentration in baths, determining by measuring electrical conductivity .. 171		magenta-forming couplers containing .. 397		
451	equipment, modern, measurement and control problems in .. 283		hypochlorite ( <i>see also</i> Sodium hydroxide)		for nitroaminobenzene dyes .. 194		
29	internal or external, of paper, aqueous dispersion of rosin anhydride for machine .. 251		— action on carboxymethylcellulose .. 316		for nylon .. 164, 238		
191	— with multi-cylinder dryer .. 283		silicoaluminate-titanium dioxide, amorphous complex pigment .. 243		— combination of copper compounds and tertiary phosphine dihalides as .. 316		
207	materials derived from starch .. 193		sulphite or stannous chloride, rate of reduction of azo dyes by .. 295		organosilane, for vulcanised elastomers .. 286		
191	paper .. 76		<b>Sodyeco dyes on cotton piece goods (SDY)</b> .. 283		for polymers, 2,2-di(hydroxymethyl)alkyl phosphoric esters as .. 238		
315	warp, products .. 101		<b>Soft finish, durable, for fabrics</b> .. 250		for polyolefins, hydroxybenzylolans as .. 316		
21	and water- and oil-repellent compositions for textiles .. 193		<b>Softening agents</b> .. 22, 193, 238, 353		acids substituted by groups containing hindered phenol as .. 238		
191	yarn .. 249		— cationic .. 286		for poly(vinyl chloride) .. 23		
315	<b>Skins, treatment</b> .. 364		— for cotton and synthetic-polymer fibres .. 286		ultraviolet .. 316		
75, 250	<b>Slime control agent, liquid non-mercurial, and preservative for paper industry (ICI)</b> .. 282		— quaternary ammonium, oxacyanine fluorescent brighteners for use with .. 291		— for rigid poly(vinyl chloride) resins, nickel di-isopropanolamine nitrate or nickel cerous nitrate .. 252		
402	<b>Slubbing, dyed, bulk-scale trials to investigate influence of pH in treatment</b> .. 328		— for resin-treated textiles .. 391		<b>Stabilising azo dyes to oxidation, hindered phenols for</b> .. 285		
74	<b>Sludge (<i>see</i> Effluents, Dewatering), Drying</b>		— for use in pigment-printing pastes .. 74		cosmetic preparations to fading or yellowing by exposure to light, 1,7,7-trimethyl-3-benzylidenebicyclo(2,2,1)heptanone-2 for .. 316		
298	<b>Smooth-drying dimensionally stable finish for keratinous fabrics</b> .. 250		cellulosic fabric .. 249		knitted tubular fabric .. 163		
33	and durable-press finish, for garments .. 169		emulsifying and bactericidal agents .. 67		nylon fabrics to heat .. 76		
249	— with improved abrasion resistance .. 22		lubricating and antisoil finish .. 206		organic polymers to ultraviolet radiation .. 170		
250	finish .. 33, 250		and/or water-repellent agents for cellulosic fibres .. 285		organic substances to oxidation and/or light, 5-aminocytosine and/or derivatives for .. 238		
104	— abrasion-resistant delayed-cure for cellulose textiles .. 169		<b>Softness, strength and water repellency, improved, imparting to cellulosic and synthetic-polymer textiles</b> .. 299		plastics to light and oxidation, 4-benzoyl-6-(dialkylhydroxybenzyl) resorcinol compounds for .. 286		
192	— for cellulose textiles 104, 169, 205, 250, 299, 403 .. 33		<b>Soil, dry-, resistance, rapid and reproducible determination of</b> .. 404		polycaprolactam .. 35		
242	— applied from organic solvent .. 40		— release properties of low-viscosity carboxymethylcellulose in crosslinking cellulose .. 298		polychloroethylene with metallic benzoates .. 390		
204	— and chemical modification of cellulosic materials, poly(vinyl alcohol) and starch .. 250, 327		<b>Soil-repellent finish for synthetic-polymer fibres</b> .. 299		polymers containing ester groups .. 34		
282	— for cotton fabrics .. 169, 250		<b>Soil-resistant, dry-, antislip and dulling finish</b> .. 33, 251		polyolefins to heat .. 252		
282	— cyclic NN'-subst. sulphamide derivatives .. 327		finishes .. 251, 286		polypropylene fibres .. 170		
243	as .. 327		and flame-resistant finishes for cotton .. 206		rubber, mixtures of phenols for .. 286		
359	— durable, on cellulose textiles .. 250, 403		and soil-release properties, improved, durable-press fabrics having .. 403		set, methods, durable-press effects in wool .. 205		
294	— for garments containing wool .. 250		and water-resistant finish .. 163		wool, with polymeric aminimides .. 33		
243	finishing, apparatus for .. 96		— and oil-resistant finish .. 130		— yarn for piece dyeing of cut-pile carpets, effect of twist level on ( <i>Corr</i> ) .. 61		
321	— continuous, of cellulose textiles .. 403		— and stain-repellent finish .. 286		<b>Stain finish</b> .. 131		
321	properties of fabrics .. 75		<b>Soiling properties of wool fabrics</b> .. 326		— release properties of resin-finished polyester-cellulose blends, improving .. 237		
317	<b>Society of Dyers and Colourists Annual Dinner</b> .. 220		<b>Solvent (<i>see also</i> Dyeing, Finishing, Processing, Scouring)-based finishing, machine and process development for</b> .. 74		— repellent and water-resistant finishing of textiles .. 402		
293	Annual General Meeting .. 217		dyes, anthraquinone .. 319		— resistant finish for natural and synthetic-polymer fabrics .. 170		
293	Associates, election 1971 .. 123, 313		— azo, influence of addition to polymerisation system of polystyrene on molecular weight .. 286		water and oil repellency by use of organic fluorocarbons .. 238		
293	Committees 1971-72 .. 1		— concentrated solutions, for colouring petrol and lubricating oils .. 68		water-, oil- and soil-repellent finish .. 286		
293	Corporate and Non-Corporate membership .. 1		— polyazo .. 164		<b>Staining behaviour of fluoropolymers, study through contact angles in air and under water</b> .. 298		
293	death of members .. 17, 64, 93, 121, 280, 313		medium, peroxide bleaching of wool in .. 201		jute, preventing in carpet dyeing .. 362		
293	deposition of sealed communications .. 3		organic, influence on properties of textile materials .. 246		nylon by chloride during dyeing, preventing .. 324		
23	diplomas and medals, presentation .. 122		— smooth-drying finish for cellulose applied from .. 33		<b>Stannous chloride or sodium sulphite, rate of reduction of azo dyes by</b> .. 295		
23	diplomas in tinctorial technology .. 2		preparation, Markal processes for .. 101		<b>Starch anthranilates, azo dyes</b> .. 196		
23	election of Officers and Members of Council .. 1		recovery (Sy) .. 517		chemical modification .. 250, 327		
287	Fellows, election .. 63, 123		scouring .. 72		and poly(vinyl alcohol) bound to cellulose by treatment with $\beta$ -oxyethyl sulphones .. 206		
245	historical records .. 4		selection .. 398		sizing materials derived from .. 193		
322	Honorary Fellowship .. 123		<b>Solvents, dry-cleaning, detergents for use in organic, chemical modification of cotton using</b> .. 169		<b>Static charges on man-made fibres in relation to conditions of use</b> .. 205		
245	<b>Journal, notice to authors of papers</b> .. 2		— high-boiling, colour couplers having high solubility in .. 359		<b>Statistical design, use for all experiments</b> .. 36		
250	— 1000th meeting of Publications Committee .. 387		— hydrophilic, influences on particle size of direct dyes in solution .. 23		<b>Steamer, high-temperature, web, roller seal for textile</b> .. 389		
169	Junior Members .. 1		textile processing in .. 32		<b>Steaming or drying textiles</b> .. 284		
393	Library .. 3		treatment of textiles in .. 245		narrow fabric to fix dyeings .. 389		
289	meetings of Council and Committees .. 17, 64, 93, 121		waste disposal .. 353		textile webs .. 315		
240	membership fees and categories .. 1		<b>Space dyeing (<i>see</i> Dyeing, Polychromatic dyeing)</b>		textured yarn .. 96		
168	obituary notices .. 92, 159, 189, 233, 312, 351						
54	objects .. 1						
61	Official opening of Perkin House .. 128						
72	Officers and Council 1971-72 .. 209						
352	Officers and Members of Council, election regulations .. 1						
238	Past Presidents .. 210						
285	Regions and Junior Sections .. 214						
363	Perkin Medal .. 124						
	report of Regions and Junior Sections for 1970-71 (N) .. 234						
	representatives on external bodies .. 213						
	retiring President's message .. 216						
	rubbing-fastness tester (FTCC) .. 156						



	PAGE
Stencil, cylindrical .. .. .	284
flat-screen, pneumatic device for tensioning ..	389
Stenter .. .. .	192, 352
clip .. .. .	21
for flat knitted webs .. .. .	192
frame .. .. .	21
Stiffening agent .. .. .	238
— quaternary nitrogenous cellulose ethers ..	23
Stilbene (see also Fluorescent brighteners)	
amino-, <i>N</i> -substituted, fluorescence ..	286
fluorescent complexes .. .. .	23
Stone, naturally occurring porous, colouring ..	168
Strain-resistant topcoat, resin compositions	
having .. .. .	35
Stretch fabric .. .. .	205
— polyester-cotton blend .. .. .	251
— producing by use of chemical modifiers and	
increases in warp tension .. .. .	403
— two-way .. .. .	33
finish, simultaneously crosslinking and im-	
parting to cellulosic fabric .. .. .	136
— for triacetate textiles .. .. .	170
wetwise, imparting to woven webs .. .. .	66
Stretchability, imparting to fabric having poly-	
ester weft .. .. .	327
Stretching, warp-wise, of fabric .. .. .	389
webs evenly .. .. .	21
Stripiness in dyed fabrics, origins .. .. .	295
in woven and knitted nylon fabrics, avoiding	
102 .. .. .	
Stripping disperse dyes from hydrophobic fibres	
dyes from nylon or polyester materials,	
laboratory methods for (Corr) .. .. .	16
of polyester dyeings with trichloro-	
ethylene (Sy) .. .. .	512
webs from nip rollers .. .. .	20
Styrene (see also Colouring)	
— acrylic-butadiene copolymers, enhancing	
resistance to discoloration by heat .. .. .	34
Styryl (see also Disperse dyes)	
hemicyanine, merocyanine and complex dyes	
merocyanine, carbocyanine and cyanine dyes,	
intermediates for .. .. .	241
Sublimation fastness of disperse dyes .. .. .	391
— in mixtures .. .. .	207
Sublimate printing (see Printing)	
Succinic acid derivatives as detergents .. .. .	130
Sudan III and Aniline Blue, Quinoline Blue,	
Naphthol Yellow or Methyl Red, mixture	
for use in colour radiography .. .. .	359
Suede-like sheet material .. .. .	170, 251, 352
Sulphation of wool as dye-resist process .. .. .	101
Sulphonates $\beta$ -oxyethyl, chemical modification	
of cellulose with .. .. .	206
— poly(vinyl alcohol) and starch bound to	
cellulose by treatment with .. .. .	206
Sulphur dioxide, effect of light and air contami-	
nated with, on surface of nylon 6.6 fibres ..	
245 .. .. .	
— formaldehyde, gaseous, durable-press	
process .. .. .	248
— reaction of cellulosic fabrics with air	
contaminated with .. .. .	32
dyes (see also Condense dyes)	
— commercial and technological assessment	
202 .. .. .	
— thiosulphonates, dyeing cellulose with ..	
30 .. .. .	
— water-soluble .. .. .	319
Sultones, reacting cellulose with .. .. .	206
Supersensitisers, combination of methine dyes	
as .. .. .	297
mixtures of carbocyanine dyes as .. .. .	247
mixtures of methinecyanine dyes with styryl	
bases as .. .. .	297
Surface decoration, multicolour .. .. .	28
tension, of ionised dye solutions (C) .. .. .	301
— measurement (C) .. .. .	303
Surfactants (see also Tensides) (P) .. .. .	173, 353
anionic, $\zeta$ -potentials and surface adsorption	
of natural and synthetic-polymer fibres in	
aqueous solutions .. .. .	30
coatings for iron blue to improve storage	
stability .. .. .	359
detergents and monomers for acrylic co-	
polymers, 2-amido-2-alkenesulphonates as	
ionic, adsorption on carbon black .. .. .	67

## Surfactants—continued

in magnetic inks, lecithin as .. .. .	244
non-ionic .. .. .	285
— polyester .. .. .	285
— solubilisation of dyes by .. .. .	193
plasticisers and drying agents .. .. .	67
properties of monoethyl-polyethylene, synthesis	
and investigation, glycol esters of aliphatic	
acids used as emulsifying agents .. .. .	237
synthetic, comparative study of efficacy and	
biodegradability .. .. .	237
use in tanning of leather .. .. .	404
Sutures (see Dyeing)	
Sweaters (see Dyeing and finishing)	
Swelling, method for rapid measurement ..	
171 .. .. .	
wool, effect of concentration of formic acid	
and thioglycolic acid on (C) .. .. .	335
Synacril dyes: dyeing and fastness properties on	
Acrlan 57 acrylic fibre (ICI) .. .. .	282
Syntans, aftertreatment of dyed nylon with (P)	
anionic .. .. .	131
detection on dyed nylon (Corr) .. .. .	157
for producing shrunken grain leathers ..	
252 .. .. .	
Synthetic-polymer fibres (see also Delustering,	
Tinting)	
antisoiling .. .. .	360
and cellulose textiles, metallising .. .. .	136
and polyamide fibres, natural, normally sub-	
stantive to acid dyes, resist for .. .. .	295
production .. .. .	399

## T

Tak machine for random coloration .. .. .	162
multicolour carpet-dyeing process .. .. .	360
Tannery waste survey .. .. .	237
wastes, total treatment .. .. .	237
Tannic acid, adsorption and diffusion behaviour	
in nylon (P) .. .. .	5
extraction of gallotannins from (P) .. .. .	4
Tanning agent, chrome .. .. .	170
— with dyes, ultraviolet and visible spectra (P)	
6 .. .. .	
— effects on dyeability of nylon 6 and wool (P)	
9 .. .. .	
— for use in dyeing leather: formaldehyde-ter-	
penic sulphonic acid condensates .. .. .	238
and dyeing, leather, aminoplast-sulphonated	
phenolic compounds as assistants in .. .. .	76
industry, and water-quality standards ..	
237 .. .. .	
leather, use of surface-active agents in	
rural, dyeing and finishing of leather in ..	
30 .. .. .	
Tannins, natural, aftertreatment of dyed nylon	
with (P) .. .. .	4
Tear strength and lustre of fabrics, improving ..	
76 .. .. .	
Temperature, measurement in textile finishing	
equipment .. .. .	404
Tensides, reactive, recovery of wool fat by	
washing raw wool with .. .. .	322
Tensile strength of crosslinked cellulose fabrics,	
improving .. .. .	363
Tenter .. .. .	389
clips .. .. .	20
Terasil dyes on polyester fibres (CGY) .. .. .	160
Terindosol dyes for pad-dyeing of polyester-	
cellulosic fibre blends (S) .. .. .	96
Terpene-formaldehyde sulphonic acid conden-	
sates: tanning agents for use in dyeing	
leather .. .. .	238
Test methods and quality-control programmes	
for bonded and laminated apparel fabrics ..	
171 .. .. .	
Testing, chemical, methods of obtaining textile	
specimens for .. .. .	207
textile, washing processes in .. .. .	364
Tetrazolium compounds for dyeing keratinous	
fibres .. .. .	296
Tetrazotised compounds, production .. .. .	393
Textiles (see also Bonding, Coating, Laminating,	
Radiation)	
coated with aminoethylaminopropyl trialkoxy-	
silane and dyed .. .. .	204
complaints and damaged materials, micro-	
scope study .. .. .	35

## Textiles—continued

economy in future, cotton in .. .. .	29
fibres, spectrochemical elemental analyses ..	
29 .. .. .	
hydrophobic, antistatic agent for .. .. .	33
industry, and consumer .. .. .	328
— instrumentation in .. .. .	191
— occupational training in .. .. .	328
— of Western Europe, analysis of short-term	
fluctuations in .. .. .	254
manufacturing processes, illumination in	
modifying, with methylolated lactams ..	
251 .. .. .	
polyurethane-coated, as leather substitute	
specimens for, methods of obtaining, chemical	
testing .. .. .	207
storable, modifiable .. .. .	363
wastes, treatment .. .. .	237
Texturing, continuous, of textile materials	
false-twist, of synthetic-polymer fibres, effect	
of temperature variations on dyeability ..	
202 .. .. .	
Thermofix (see also Dyeing)	
processing, developments in .. .. .	322
simultaneous, of disperse and reactive dyes on	
cellulose-synthetic-polymer-fibre blends ..	
30 .. .. .	
Thermoplastic (see also Mass coloration)	
fibres, surface-modified .. .. .	200
polymers, pigment compositions for dis-	
persion in .. .. .	293
Thermosetting polymers, water-soluble .. .. .	164
Thiazines, 7-aminophthaloylpheno-	
395 .. .. .	
Thiazine dyes, photo-oxidation by <i>p</i> -benzo-	
quinone with light impulse excitation ..	
67 .. .. .	
Thickeners (see Printing)	
Thiocyanates of basic aminotriarylmethane dyes	
for inks .. .. .	134
Thioglycolic acid, effect of concentration on	
swelling of wool .. .. .	335
Thiol-reduced wool, mechanisms of set-super-	
contraction in (Corr) .. .. .	14
Thiophen derivatives of cotton, rot resistance ..	
248 .. .. .	
photochromic .. .. .	26
Thiourea dioxide, use in vat dyeing .. .. .	360
reducing pH and increasing volatile content of	
furnace black by heating with .. .. .	397
retention of brightness of bleached wood pulp	
by incorporating in bleaching liquor ..	
246 .. .. .	
Tinting composition, for paints .. .. .	294
— universal, for use in aqueous and non-	
aqueous paints .. .. .	321
fugitive, of synthetic-polymer fibres .. .. .	198
Titanium dioxide (see also Coating, Weathering)	
27, 100, 199 .. .. .	
acicular .. .. .	27
acid-reacting, neutralising .. .. .	398
alkali-metal titanate, pigmentation composi-	
tions .. .. .	166
— alumina pigment, co-oxidised, fade-resistant,	
opacifying .. .. .	293
anatase, pure .. .. .	321
— or rutile, improving pigmentary properties	
24 .. .. .	
— calcium carbonate pigment, composite ..	
398 .. .. .	
coated, delustering synthetic-polymer fibres	
24 .. .. .	
concentrate from ilmenite ores .. .. .	292
in delustrated poly(ethylene terephthalate) and	
nylon 6, polarographic determination ..	
328 .. .. .	
dispersions for delustering nylon .. .. .	67
double-coated .. .. .	398
factors affecting pigment behaviour in	
typical electrocoating systems .. .. .	294
free of coloured impurities by wet process ..	
398 .. .. .	
hydrosol, high-dispersion, interaction with	
carboxylic acids in sulphate solutions ..	
39 .. .. .	
of improved hiding power and gloss .. .. .	27
of improved resistance to chalking .. .. .	199
of improved stability in latex paints .. .. .	27
of improved wettability .. .. .	27
improving tinting strength and hiding power	
by coating with hydrous metal oxide ..	
29 .. .. .	
of increased rutile content and pigments con-	
taining titanium dioxide complexes, ..	
production by sulphuric acid process ..	
39 .. .. .	
inhibiting greying .. .. .	19



PAGE		PAGE		PAGE		PAGE	
	<b>Titanium dioxide—continued</b>		<b>Trimethylsilyl derivatives for gas-chromatographic analysis of textile fibres and finishes</b>	171		<b>Washing—continued</b>	
29	nongelling, for use in gel-resistant latex paints	359	<b>Triphenylmethane dyes (see also Basic dyes)</b>			effects on stability to light of nylon 6 filaments	101
29	photoconductive	321	heat-unstable organic acid salts, as sensitizers for organic photoconductors	169		machines, abrasive damage caused to 100% durable-press cotton fabrics by	363
33	photographic reproduction using	298	and indocyanine dyes, combination, sensitizers for direct positive emulsions	401		— measuring intensity of agitation, by means of shrinkage of wool	29
128	photosensitive	293	<b>Trisazo dyes (see also Azo dyes, Disazo dyes)</b>	393		processes in textile testing	364
191	-pigmented paints, extended with synthetic sodium aluminosilicate	294	<b>Tristimulus values of prints and mileage of printing inks</b>	404		textile materials	21, 284, 315
328	pigmenting of polymers intended for powder coating	398	<b>Typewriters, transfer compositions for use in</b>	298		water consumption in (P)	138
254	pigments, adsorption of alkyd resins and relation to hiding power of alkyd paint systems	294	<b>Tyre-cord fabric, processing</b>	162		<b>Wastes, domestic and dyehouse, mixtures, pilot-plant studies</b>	21
208	— coated, electrophoretic study of surface properties	287				fractions, re-use	237
251	— containing alumina	135				survey, tannery	237
251	— of improved photochemical resistance	398				textile, finishing, biological treatment	390
	— rapid test for tint retention and resistance to chalking in outdoor paints	244				— treatment	237, 316
	— for stoving lacquers	243				<b>Water (see also Clarification, Effluent, Wastes)</b>	
	radiation-activatable, for copying purposes, cyanine and hemicyanine dyes for use with readily dispersible, production	293				conservation, and effluent disposal in wool textile industry (Sy)	481
	rutile	27				— and effluent treatment	285
	— having light-scattering coefficient in 460-nm blue light at least 1.5 times that in 610-nm red light	293				— and separation of waste fractions	237
293	slurry, high-solids	398				consumption, methods of measuring (P)	137
164	silicone treatment	287				content of effluent sludge, reducing	130
395	-sodium silicoaluminate, amorphous, complex pigment	243				diffusion in polymer films: notions, fundamental laws, and characteristics	252
	softer, less-sintered	359				and effluent treatment, ozone for	390
	stability of dispersions	164				free, composition for detecting	35
134	of tinting strength at least 1500, wet process for producing	398				near solid interfaces, density	254
335	treated with silica and zinc oxide for paper systems	293				pollution, problems, in textile industry in France	21
14	for use in emulsion paints, spray drying	398				purification by flocculation	192
248	<b>Toner, electrostatic</b>	244				-quality standards and tanning industry	237
26	particles, xerographic, spherical, containing colorant and resin	359				removing, from fabric	250
360	pressure fixing, without use of heat	247				re-use in textile processing (P)	143
	xerographic	325				treatment	192
397	<b>Tops (see Printing, Wet treatment)</b>					use and conservation, in textile processing (P)	137
	<b>Tows (see Wet treatment)</b>					-vapour-permeable sheets, flexible	327
246	<b>Training, occupational, in textile industry</b>	328				waste, chemical precipitation and flocculation	163
294	<b>Transfer compositions for use in typewriters</b>	298				— improved secondary treatment requiring less cationic polymer	237
	covercoat	31				— industrial, flocculants for	163
321	material, pressure-sensitive, capable of being pigmented with high-colour-density carbon black	297				— process and plant for biological purification	130
198	-paper suppliers (Sy)	489				<b>Water repellency, coating adhesion and mechanical properties, improved, nylon and polyester fabrics having</b>	250
27, 100, 199	printing (see Printing)					softness, and strength, improved, imparting to cellulosic and synthetic-polymer textiles	299
27	pyrogenic, collection	96, 162				stain and oil repellency by use of organic fluorocarbons	238
398	sheet having transfer layer different in colour from copy it produces	169				<b>Water repellent agents</b>	390
166	<b>Transfers, ceramic, as bases for gold, silver or platinum decorations</b>	362				— carbosamido-aziridine	163
293	multicoloured, heat-applicable	74				— for coating on moulding compositions containing inorganic binders	285
321	<b>Transparency, colour projection, fade-resistant sheet for making</b>	325				— silicon compounds	23
398	<b>Transparent materials, colorimetry</b>	299				composition, oxazoline	22
243	<b>Treating lignocellulosic materials to produce stable colour</b>	201				and crease-repellent finishing agents	238
293	<b>Trevira (see Dyeing)</b>					and crease-resistant finish	205
328	<b>Triacetate textiles, stretch finish for</b>	170				and durable-press finish	353
67	<b>Triarylmethane, amino-, basic dyes, and thiocyanates for inks</b>	134				finish	131, 363
398	light-sensitive systems, improving sensitivity	169				— for cellulosic materials	205
	<b>Triazine derivatives as antioxidants</b>	23				— durable, production on cotton with no loss of vapour permeability	104
	and related products: structure of red N-alkyl-1,2,3-benzotriazines	67				— fluorinated paraffin wax as	316
27	<b>-Triazine finishes, substituted, on cotton fabrics, resistance to</b>	205				and lustrous finish for leather garments	170
199	hexahydro-1,3,5-triazolyl-, creation of reactive centres on cellulose using	326				and oil-repellent agents	67, 130, 193, 238
27	substituted, cotton fabric treated with	199				— for use on deferred-cure durable-press garments	193
293	<b>Tricarbocyanine dyes</b>	357				and oil-repellent finishes, durable	391, 403
	<b>Trichloroethylene (see Stripping)</b>					— for fibrous materials	75
397	<b>Trimethinecyanine dyes</b>	395				fluorinated glycidyl ethers as	193
199	and benzimidazole intermediates therefor as sensitizers in photographic emulsion	289				fluorinated polyesters as	193
		290				— fluoroalkylamidomethylpyridinium compounds as	316
						— and soil-resistant finish	130
						— soil- and stain-repellent finish	286
						sizing and oil-repellent compositions for textiles	193
						and/or softening agents for cellulosic fibres	285
						and soil-resistant finish	163
						and stain-repellent finishing of textiles	402
						<b>Waxol PA (ICI)</b>	161
						<b>Wearing, pilling and fuzzing properties, nylon composition for coating and impregnating carpets to improve</b>	364

	PAGE
<b>Weather</b> resistance, excellent, and excellent fastness to colour and gloss, two-component polyurethane lacquers having .. ..	321
— high, thermosetting acrylic enamels of ..	321
— resistant coating composition, aluminium-bituminous, coloured .. ..	294
— for metal substrates .. ..	294
and rot resistance, imparting to cotton fabrics ..	32
<b>Weathering</b> , accelerated, of pigment vehicles ..	404
effect on compression and recovery properties and wear performance of carpets .. ..	298
of paint films: influence of wavelength of radiation and temperature on chalking of latex paints .. ..	294
of polyester gel coats .. ..	328
properties, good, thermosetting acrylic copolymer coatings having .. ..	294
resistance of coloured ropes made from polyolefin fibres .. ..	171
and titanium dioxide .. ..	294
<b>Web</b> (see also Conveying, Mangling, Stretching, Stripping, Washing)	
— batching apparatus .. ..	20
— fabric, relaxing .. ..	104
— guide .. ..	284
<b>Wet</b> recovery of cellulose textiles, increasing ..	206
<b>Wet treatment</b> , continuous, of tows or tops ..	66
— dyeing or other, of textiles .. ..	192
— of fibrous material .. ..	315
— and singeing of textiles .. ..	352
— of textile fibres .. ..	315
— of webs, in open width .. ..	192
— and slivers .. ..	192
<b>Wettability</b> of synthetic-polymer filaments, enhancing, while simultaneously imparting an antistatic finish .. ..	251
<b>Wetting</b> agents, dispersing agents and polymers, water-soluble, influence on stability of azo disperse dyes .. ..	286
— for use in cold alkaline baths .. ..	97
<b>White</b> , perception in 10° field .. ..	172
<b>Whiteness</b> and brightness of kaolin, improving ..	135
— of kaolin, improving .. ..	166
— and stability to discoloration of zinc oxide pigment, improving by treatment with fluoride at 600–950°C .. ..	243
<b>Winch</b> (see also Dyeing machines)	
— beams and jet-dyeing machines, high-temperature, in knitting industry .. ..	284
<b>Wira</b> automatic dissolving unit .. ..	284
<b>Wires</b> , enamels for .. ..	29
<b>Wool</b> (see also Antifelt, Bleaching, Carbonising, Chlorination, Coloration, Crease recovery, Crosslinking, Durable press, Dyeing, Effluent, Felting, Finishing, Flame resistant, Flame retardancy, Flame retardant, Grafting, Keratin, Milling, Mothproofing, Printing, Scouring, Setting, Shrink resistant,	

## Wool—continued

	PAGE
Singeing, Soiling, Stabilising, Swelling, Yellowing)	
absorption of formaldehyde by .. ..	326
action of peracids and hydrogen peroxide on ..	104
amide and ester crosslinks in .. ..	167
application of dye to (C) .. ..	117
application of pigments by resin bonding (C) ..	145
— cellulose blends, modifying both components in .. ..	363
chemical modification, assessment of degree ..	207
determination of chloride in .. ..	207
dimensional stabilisation with reactive polymers .. ..	363
dyeing, hydrolysis (C) .. ..	117
effect of dimethyl sulphoxide on chemical and physical properties .. ..	402
effect of dry heat on .. ..	72
effect of light on .. ..	360
effects of tanning agents on dyeability and physical properties (P) .. ..	9
epicuticle, effects of shrink resisting and other chemical treatments on .. ..	249
estimation of crosslinks in .. ..	171
fabric, standard reference, for colour-fastness testing .. ..	364
fat, recovery by washing raw wool with reactive tensides .. ..	322
graft polymerisation on, without affecting aesthetic properties .. ..	75
Hostalan dyes for dyeings of good fastness on knitwear, rapid method of estimating paraffin-wax content of .. ..	404
multicolour effects from single dyebath .. ..	73
reaction of acid with (C) .. ..	112
reaction with cyanamide .. ..	402
reaction of Lanazol dyes with .. ..	73
reaction of nylon-epichlorohydrin resin with ..	33
removal of chlorotriazinyl reactive dyes from scoured, measurement of fibre entanglement in .. ..	207
— rapid determination of residual grease on shrinkage, measuring intensity of agitation in washing machines by means of .. ..	29
and silk, increasing strength .. ..	250
stripping of hydrolysed dye from (C) .. ..	182
sulphation, as dye-resist process .. ..	101
textile industry, water conservation and effluent disposal in (Sy) .. ..	481
thiol-reduced, mechanism of set-supercontraction in (Corr) .. ..	14
treated with dimethylethyleneurea, change in amino-acid composition .. ..	325
treated with reducing agents, inhibiting formation of odour in .. ..	403
treatment with alkali .. ..	398

## X

<b>Xanthene dyes</b> (see also Basic dyes)	
electron spin resonance study of radical intermediates in photoreduction of ..	239
two-component diazotype compositions containing .. ..	136
<b>Xerographic</b> toner .. ..	325
— particles, spherical, containing colorant and resin .. ..	359
<b>Xerography</b> , phthalocyanines for .. ..	100
preparation of high-purity phthalocyanine for use in .. ..	290
<b>Xylene</b> Light Yellow Brown RL (S) .. ..	96

## Y

<b>Yarn</b> (see also Drying, Steaming)	
differential dyeing .. ..	29
filament, polymeric sizes for .. ..	245
laboratory apparatus for treating with corrosive chemicals under tension .. ..	35
<b>Yellowing</b> and bleaching of wool, by light ..	295
— by ultraviolet radiation (Corr) .. ..	63
of cellulose during hot alkaline treatment, inhibiting .. ..	249
or fading of cosmetics by light, 1,7,7-trimethyl-3-benzylidene-bicyclo-(2,2,1)-heptanone-2 for stabilising .. ..	316
of nylon (P) .. ..	39
of prints developed from diazotypes containing heat-fugitive acids or salts, olefinmono-carboxylic amides and derivatives for inhibiting .. ..	362
of wool .. ..	72
— reducing tendency to .. ..	299

## Z

<b>Zapon</b> fast colours (BASF) .. ..	281
<b>Zeta</b> -potential studies in cellulose fibre-aqueous electrolyte solution systems (C) .. ..	338
<b>Zinc</b> dithionite .. ..	390
metatitanate white pigment for paper-coating compositions .. ..	293
oxide, adsorption of dyes on: effect of non-stoichiometry .. ..	97
— improving whiteness and stability to discoloration by treatment with fluoride at 600–950°C .. ..	243
— paints pigmented with, durability .. ..	398
— and silica, ceramic pigments based on ..	293
yellow, influence of moisture .. ..	23
<b>Zirconium</b> and iron, ceramic pigments based on ..	397

# LIST OF BRITISH PATENTS ABSTRACTED

The date in brackets is that of the patent application

No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page
1,058,954	21	1,205,394	244	1,208,914	75	1,211,635	100	1,214,545	197	1,217,687	132	1,220,450	292	1,222,945	241
1,166,339	401	423	29	986	69	636	103	546	66	462	195	463	195	955	243
1,175,120	33	570	23	1,209,006	69	651	97	556	294	714	98	463	195	970	242
138	25	578	29	063	247	705	100	577	131	777	206	470	254	994	250
1,181,744	26	680	20	220	31	736	97	588	136	813	285	561	251	1,223,011	239
1,182,743	24	703	244	241	67	777	294	677	130	819	131	587	205	012	240
1,186,147	25	713	251	264	69	786	99	839	251	839	204	033	198	033	198
715	395	768	244	288	68	801	69	940	131	905	196	634	199	089	198
993	99	768	244	312	75	802	69	1,215,093	252	935	195	778	247	102	327
1,187,087	98	789	28	333	67	804	133	941	294	787	192	795	247	137	195
249	100	845	34	334	74	805	98	1,218,019	196	941	294	165	192	155	320
598	99	881	25	387	20	928	99	048	133	048	133	823	195	166	192
645	98	907	34	409	244	985	99	064	298	852	195	191	320	370	240
1,188,195	29	974	34	417	21	1,212,113	294	234	252	160	242	269	288	371	238
1,189,769	23	1,206,052	30	428	20	181	171	455	98	168	193	270	293	373	239
1,194,537	389	160	34	591	67	121	101	458	136	170	294	298	291	414	294
1,199,062	25	179	24	627	70	181	171	472	134	249	167	304	288	438	285
794	25	199	24	631	70	204	70	476	99	250	168	312	198	498	295
795	26	227	27	710	70	236	102	498	130	260	101	341	325	527	292
796	26	306	27	755	68	262	294	514	134	265	133	102	243	528	292
797	25	491	24	858	72	289	71	554	136	271	96	111	327	529	293
798	26	492	24	867	103	296	98	576	135	394	164	112	327	554	293
1,200,255	389	534	28	897	35	346	100	618	136	399	100	116	316	562	291
1,201,002	294	542	27	926	170	358	103	639	135	400	100	126	247	615	290
292	294	542	27	945	68	424	244	778	171	479	133	165	192	633	295
327	20	601	22	973	76	471	96	804	130	497	204	181	196	653	295
816	294	620	32	992	76	570	73	861	131	182	197	467	206	801	286
963	294	798	26	1,210,009	70	731	298	871	134	193	192	474	199	891	292
1,202,451	294	798	26	056	67	846	71	941	136	547	198	489	355	892	292
1,203,427	33	796	244	085	20	883	245	986	135	604	197	531	191	905	295
442	23	846	24	103	73	992	68	990	135	670	163	574	205	922	288
449	130	924	247	174	98	1,216,015	172	792	130	715	163	639	321	950	240
474	29	1,207,004	33	197	20	066	162	794	208	443	237	678	238	974	287
558	27	006	26	252	70	078	135	802	169	455	241	800	192	1,227,050	358
603	34	075	247	391	76	106	96	803	162	469	251	824	322	166	293
604	34	213	26	463	68	203	247	843	198	493	245	826	193	172	317
675	26	249	70	477	244	254	131	861	170	503	198	884	192	229	240
693	28	290	27	509	67	278	135	862	170	579	244	1,224,026	238	239	292
826	28	512	27	517	66	288	136	867	167	582	238	071	246	240	287
1,204,059	30	520	24	534	66	354	134	913	170	613	192	615	325	271	297
110	30	529	24	540	76	390	71	936	169	615	325	649	247	293	289
163	33	530	24	547	76	396	131	940	194	115	321	686	247	387	292
211	22	530	24	562	66	398	170	943	163	115	321	714	252	391	285
282	28	727	22	578	36	516	136	970	195	128	196	715	191	392	291
326	27	786	247	599	69	524	252	1,219,004	164	728	196	728	196	413	284
361	24	793	244	628	67	539	248	016	165	748	238	748	238	498	294
411	31	794	244	718	244	540	71	034	168	751	250	413	240	514	297
420	26	795	29	748	75	609	168	041	134	801	325	424	288	538	243
426	31	860	20	782	294	629	135	094	167	803	242	508	243	658	243
511	27	864	25	782	294	697	131	166	166	804	252	513	288	661	286
601	27	878	24	821	69	719	247	747	251	811	295	627	244	675	284
665	31	905	27	845	99	745	130	748	252	812	297	632	325	681	297
680	32	980	33	878	97	751	136	758	99	820	194	689	242	703	293
735	24	1,208,027	27	891	71	769	135	781	130	849	238	739	197	713	292
866	34	027	27	928	103	782	294	810	96	875	319	887	321	767	285
889	30	055	22	952	99	803	294	858	96	888	242	892	288	790	286
964	32	117	24	966	244	804	294	878	252	889	244	919	195	824	290
1,205,100	31	190	31	972	100	806	294	887	100	937	242	1,225,011	283	825	290
112	237	215	35	980	21	823	248	896	134	985	241	056	192	826	290
251	29	223	69	1,211,013	104	824	248	935	104	1,222,003	244	157	237	871	317
287	24	238	31	014	170	835	131	975	131	068	250	176	238	989	287
291	22	278	170	046	21	858	251	1,217,001	205	096	240	201	191	1,228,041	291
358	26	286	34	048	97	960	71	065	199	201	191	221	243	150	328
365	30	346	25	078	68	976	74	137	193	225	244	224	242	475	287
391	31	391	25	079	98	988	134	147	132	266	283	322	192	497	243
		402	73	116	97	993	133	215	252	301	319	336	198	538	293
		406	98	136	66	994	133	272	132	314	198	344	290	552	293
		440	25	140	66	995	133	341	327	423	250	494	328	634	296
		469	69	149	103	1,214,076	168	342	327	444	242	545	198	668	299
		470	72	203	101	087	136	351	136	474	283	566	199	694	328
		484	73	208	103	096	71	380	203	502	251	633	321	849	297
		487	132	302	172	194	71	479	290	533	319	634	316	850	285
		553	27	304	21	263	66	488	201	534	195	671	316	859	287
		558	71	305	33	323	133	521	102	558	316	700	192	923	287
		597	244	339	170	325	252	546	100	614	238	702	244	1,229,023	318
		620	66	344	101	349	136	569	98	686	238	710	325	027	240
		688	71	375	99	361	135	584	100	687	238	723	247	125	294
		691	67	385	103	394	134	590	193	744	191	818	243	215	298
		698	67	421	20	403	69	592	293	849	195	924	241		
		895	70	478	73	525	135	594	199	883	192	980	321		
				599	103	528	130	613	101	885	249				
								686	132						

# LIST OF BRITISH PATENTS ABSTRACTED—continued

No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page	No. of Patent	Page
1,229,229	285	1,230,449	297	1,232,098	356	1,234,234	327	1,235,762	322	1,237,876	315	1,239,705	359	1,241,469	393	1,242,936	397
230 285		477 284				244 325		783 324		880 394		732 358		470 393		1,243,042	395
234 285				191 284		247 355						818 357		509 398		060 396	
235 285		501 284				253 354		1,236,034	318	919 356		846 361		587 395		061 401	
258 297		525 290		241 290		269 320				925 357		868 352		592 389			
265 288						292 327		128 359		928 364		869 361		599 401		141 391	
299 289		639 284		467 320				150 353		929 364		872 394				194 399	
		668 289				320 316		167 315		967 358		892 353		601 395			
307 300				611 318		323 324		203 353		969 392				692 394		203 398	
319 292		722 290				344 320				990 353		995 352				219 401	
331 297		779 285		714 393		348 324		374 352						705 392		220 398	
350 293		787 289								1,238,081	363			757 394		223 400	
356 288		794 293		885 318		444 321		418 362		099 361		1,240,020	358			274 398	
357 317						486 320		485 316								276 396	
				1,233,001	321			539 315		118 359		196 359		820 389			
410 237		924 297		065 319		598 358		542 360				215 361		833 395		325 400	
429 293		942 291				627 316		543 360		278 357		243 392		834 395		347 390	
449 356		948 289		128 316		646 319		560 362				278 359		850 401		390 389	
						658 318				331 356		284 353		875 399			
525 285		1,231,002	297	259 316		668 354		656 393		346 353				899 400		403 400	
526 293		009 299		276 394		670 364		372 357		364 393		317 359				404 400	
		014 356				688 393		661 357				318 359		962 390		457 395	
768 355		079 297		360 324				662 357		412 359		320 359		979 404		479 396	
769 317						710 319				442 352		338 352				493 399	
780 298		162 284		479 320		727 324		710 353		443 352		398 395		1,242,019	397	549 399	
		166 284				785 315		767 359						047 393		562 398	
816 284				583 325						553 392		404 362		074 401			
847 293		232 292				810 315		882 361		594 352				106 390		652 394	
848 293		244 356		637 316		863 354		938 315				509 362				714 394	
854 246		269 297		639 321						620 360		511 353		208 401		748 393	
855 246		270 285				943 321						522 357		287 391		798 398	
881 298		279 297		729 318		972 321		1,237,017	391	757 352		527 363					
				739 320				095 359		774 360				307 399		868 400	
951 293		306 284		771 284		1,235,018	320			780 355		600 359				878 398	
989 294		334 297		772 284				107 354				742 362		449 398			
990 355		387 295		783 355		107 324		144 359		850 360				455 389		906 397	
				788 321		130 321		160 394		890 352		804 359		480 404		992 398	
1,230,076	293			793 319						896 392		832 362					
		410 291				279 328		266 353						689 398		1,244,072	401
131 292		411 290				289 319				913 392		907 359				200 391	
145 299		439 284		808 316				305 315		924 392		968 392		709 399		255 400	
167 299		481 294		842 320		303 325		347 391						756 400			
178 359				874 324		385 318				1,239,031	360	1,241,053	359	763 391		367 397	
		537 293						531 356						784 401		799 389	
211 296		592 291		901 322		592 354		554 363		106 392		102 396		798 403			
299 291		593 317		957 315		622 357		596 315				143 359					
				971 315		659 320				273 393		165 353		809 398		1,245,121	389
311 291		639 317		995 318		660 321		612 353		475 364		184 361		836 396		204 389	
		667 357				690 321		671 353						895 394			
407 285				1,234,054	319					548 393		240 396					
413 291		884 289		067 319		714 327		804 315		583 358		288 403		905 400		495 390	
438 291				072 324		729 324		810 359				400 396		934 400			
446 293		949 290		092 316		749 320		868 353		633 361							



No. of Patient	Page	No. of Patient	Page	No. of Patient	Page	No. of Patient	Page	No. of Patient	Page	No. of Patient	Page	No. of Patient	Page	No. of Patient	Page	No. of Patient	Page	No. of Patient	Page
3,258,964	403	3,472,927	22	3,478,546	162	3,486,482	162	3,493,410	166	3,501,410	292	3,507,850	242	3,518,205	358	3,526,967	390		
3,407,188	22	3,473,877	35	3,479,128	250	838	251	418	167	457	249	864	243	287	358				
3,423,349	22	881	73	129	251	839	250	424	167										
3,424,740	132	929	74	183	247	853	166	425	163	788	250	951	245	734	403	3,527,415	397		
3,428,455	165	939	130	193	135	854	253	501	163	3,502,422	245	3,508,421	247	849	389				
3,429,906	130	948	75	197	135	855	253	502	163	456	201	456	201						
3,432,342	22	949	75	201	135	856	253	504	163	467	247	854	299	3,519,380	403				
3,434,342	22	953	244	211	249	858	253	545	200	469	239	860	299	381	403				
3,454,342	36	970	294	214	130	897	165	556	164			512	244	383	403				
3,460,964	74	3,474,020	74	293	163	898	169	981	163	582	244	935	294	429	397				
3,461,029	76	053	76	3,480,379	131	902	165	3,494,048	162	583	243	3,509,048	286	430	395				
3,462,285	74	054	76	380	250	912	163	714	164	607	245	082	294	443	398				
3,463,626	36	057	294	382	136	923	170	715	168	642	241	087	294	452	397				
3,464,823	74	071	76	383	250	929	251	716	169	645	239	138	291	453	398				
3,466,180	36	396	35	433	247	453	167	719	169	743	238	143	292	455	397				
3,468,200	297	757	21	434	134	487	168	720	163			152	285	460	389				
3,470,007	27	758	21	436	134	488	168	721	172	526	191	202	287	463	398				
3,471,011	27	771	76	437	136	489	168	731	166			234	294	562	390				
3,472,011	27	823	35	443	134	490	168	732	166	599	391	350	294	563	390				
3,473,011	27	823	35	444	134	491	168	733	166	607	245	333	293	564	390				
3,474,011	27	823	35	445	134	492	168	734	166	608	245	334	293	565	390				
3,475,011	27	823	35	446	134	493	168	735	166	609	245	335	293	566	390				
3,476,011	27	823	35	447	134	494	168	736	166	610	245	336	293	567	390				
3,477,011	27	823	35	448	134	495	168	737	166	611	245	337	293	568	390				
3,478,011	27	823	35	449	134	496	168	738	166	612	245	338							

# List of Periodicals Abstracted

With Abbreviated Titles used  
JANUARY—DECEMBER 1971

ABBREVIATED TITLE	JOURNAL	ADDRESS OF PUBLISHER
<i>Amer. Dyestuff Rep.</i>	American Dyestuff Reporter	44 E. 23rd Street, New York, 10010, N.Y., U.S.A.
<i>Angew. Chem.</i>	Angewandte Chemie	Verlag Chemie GmbH, 6940, Weinheim, Pappelallee 3, Germany.
<i>Australian J. Biol. Sci.</i>	Australian Journal of Biological Sciences	Commonwealth Scientific and Industrial Research Organisation, 314 Albert Street, Victoria, Australia.
<i>Biochem. J.</i>	Biochemical Journal	Cambridge University Press, Bentley House, 200, Euston Road, London, N.W.1
<i>Bull. Chem. Soc. Japan</i>	Bulletin of the Chemical Society of Japan	5, 1-Chome, Kanda-Surugadai, Chiyoda-ku, Tokyo, Japan.
<i>Bull. Inst. Text. France</i>	Bulletin de l'Institut Textile de France	35 rue des Abondances, 92, Boulogne-sur-Seine, France
<i>Bull. Res. Inst. Polymers &amp; Text. Japan</i>	Bulletin of the Research Institute for Polymers and Textiles	4, Sawatari, Kanagawa-ku, Yokohama, Japan.
<i>Canadian Textile J.</i>	Canadian Textile Journal	Canadian Textile Journal Publishing Co. Ltd, 4920 de Maisonneuve Blvd. West, Suite 405, Montreal 215, Quebec, Canada.
<i>Chem. Abs.</i>	Chemical Abstracts	American Chemical Society, 1155 16th Street, N.W., Washington D.C. 20036, U.S.A.
<i>Chem. Commun.</i>	Chemical Communications	The Chemical Society, Burlington House, London, W1V 0BN.
<i>Chem. Ber.</i>	Chemische Berichte	Verlag Chemie GmbH, 6940, Weinheim, Pappelallee 3, Germany.
<i>Chem. and Ind.</i>	Chemistry and Industry	The Society of Chemical Industry, 14 Belgrave Square, London, SW1X 8PS.
<i>Chem. in Britain</i>	Chemistry in Britain	The Chemical Society, Burlington House, London, W1V 0BN.
<i>Chemiefasern</i>	Chemiefasern	Deutscher Fachverlag GmbH, Frankfurt am Main, Schumannstrasse 27, Postfach 3666, Germany.
<i>Color and Appearance</i>	Journal of Color and Appearance	43 Morton Street, New York, N.Y. 10014, U.S.A.
<i>Color Engng.</i>	Color Engineering	Barrington Publications, Inc., 825 S. Barrington Ave., Los Angeles, Calif. 90049.
<i>Colourage</i>	Colourage	Rajan House, Near Century Bazar, Dr. Annie Besant Road, Worli, Bombay 25DD, India.
<i>defazet-aktuell</i>	defazet-aktuell	Wissenschaftliche Verlag GmbH, Stuttgart, Birkenwaldstrasse 44, Germany.
<i>Die Farbe</i>	Die Farbe	Musterschmidt-Verlag, 34 Göttingen, Turmstrasse 7, Postfach 421, Germany.
<i>Doklady Akad. Nauk S.S.S.R.</i>	Doklady Akademii Nauk S.S.S.R.	Academy of Sciences of the U.S.S.R., Moscow, K-62, Podosenkii pereulok 21, U.S.S.R.
<i>Dyer</i>	The International Dyer, Textile Printer, Bleacher and Finisher	Textile Business Press Ltd., Dorset House, Stamford Street, London, SE1.
<i>Endeavour</i>	Endeavour	Imperial Chemical Industries Ltd, Millbank, London SW1P 4QE.
<i>Faserforsch. und Textiltech.</i>	Faserforschung und Textiltechnik	Akademie-Verlag GmbH, 108 Berlin, Leipziger Strasse 3-4, Germany.
<i>Galaxia</i>	Galaxia	Asociación Argentina de Químicos y Coloristas Textiles, Bulnes 1425, Buenos Aires, Argentina.
<i>Helv. chim. Acta</i>	Helvetica chimica Acta	Verlag Helvetica Chimica Acta, 4002 Basle, Switzerland.
<i>Hungarian Tech. Abstracts</i>	Hungarian Technical Abstracts	Hungarian Technical Abstracts, P.O. Box 12, Budapest 8, Hungary.
<i>Ind. Eng. Chem.</i>	Industrial and Engineering Chemistry	American Chemical Society, 1155 16th Street, N.W., Washington D.C., 20036, U.S.A.
<i>Indian Textile J.</i>	Indian Textile Journal	The Indian Textile Journal Pte Ltd. Surya Mahal, Military Square Lane, Bombay-1, India.
<i>Izvestiya Akad. Nauk S.S.S.R.</i>	Izvestiya Akademii Nauk S.S.S.R.	Academy of Sciences of the U.S.S.R., Moscow, Leninskii prospekt 47, U.S.S.R.
<i>J. Amer. Chem. Soc.</i>	Journal of the American Chemical Society	1155, 16th Street, N.W., Washington D.C., 20036, U.S.A.
<i>J. Amer. Leather Chem. Assoc.</i>	Journal of the American Leather Chemists' Association	Tanners' Council Research Laboratory, Room 10, Campus Station, Cincinnati, Ohio 45221, U.S.A.
<i>J. Appl. Chem.</i>	Journal of Applied Chemistry	Society of Chemical Industry, 14 Belgrave Square, London S.W.1.
<i>J. Appl. Polymer Sci.</i>	Journal of Applied Polymer Science	Interscience Publishers Ltd, 88-90 Chancery Lane, London W.C.2.
<i>J. Biol. Chem.</i>	Journal of Biological Chemistry	Mount Royal and Guilford Avenues, Baltimore 2, Maryland, U.S.A.
<i>J.C.S., C Organic</i>	Journal of the Chemical Society (C Organic)	Burlington House, London W1V 0BN.
<i>J. Chem. Phys.</i>	Journal of Chemical Physics	American Institute of Physics, Lancaster, Pennsylvania 17604, U.S.A.
<i>J. Chromatography</i>	Journal of Chromatography	Elsevier Publishing Co., 110-121 Spuistraat, Amsterdam, Holland.
<i>J. Indian Chem. Soc.</i>	Journal of the Indian Chemical Society	92 Acharya Prafulla Chandra Road, Calcutta 9, India.
<i>J. Oil Col. Chem. Assoc.</i>	Journal of the Oil and Colour Chemists' Association	Wax Chandlers' Hall, Gresham Street, London EC2V 7AB.
<i>J. Opt. Soc. Amer.</i>	Journal of the Optical Society of America	American Institute of Physics, Prince and Lemon Streets, Lancaster, Pennsylvania 17604, U.S.A.
<i>J. Org. Chem.</i>	Journal of Organic Chemistry	American Chemical Society, 20th and Northampton Streets, Easton, Pa., U.S.A.
<i>J. Paint Tech.</i>	Journal of Paint Technology	121 South Broad Street, Philadelphia, Pa. 19107, U.S.A.
<i>J. Phys. Chem.</i>	Journal of Physical Chemistry	American Chemical Society, 20th and Northampton Streets, Easton, Pa., U.S.A.
<i>J. Polymer Sci.</i>	Journal of Polymer Science	Interscience Publishers Inc., 250 Fifth Avenue, New York 1, N.Y., U.S.A.
<i>J. Res. Nat. Bur. Stand.</i>	Journal of Research of the National Bureau of Standards	Superintendent of Documents, U.S. Government Printing Office, Washington D.C., 20402, U.S.A.
<i>J. Soc. Cosmetic Chem.</i>	Journal of the Society of Cosmetic Chemists	Ashbourne House, Alberon Gardens, London NW11 0BN.
<i>J. Soc. Leather Trades Chem.</i>	Journal of the Society of Leather Trades' Chemists	52 Crouch Hall Lane, Redbourn, Herts.
<i>J. Textile Inst.</i>	Journal of the Textile Institute	10 Blackfriars Street, Manchester M3 5DR.

# List of Periodicals Abstracted — continued

ABBREVIATED TITLE	JOURNAL	ADDRESS OF PUBLISHER
<i>Khim. Volok.</i>	<i>Khimicheskie Volokna</i>	State Committee of Chemical and Oil Industry, Moscow, Krivokolennyi pereulok d.12, U.S.S.R.
<i>Kolloid. zhur.</i>	<i>Kolloidnyi zhurnal (Colloid Journal of the U.S.S.R.)</i>	Academy of Sciences of the U.S.S.R., Moscow, Shubinskii pereulok 10, U.S.S.R.
<i>Kolor. Ertesito</i>	<i>Kolorisztikai Értesítő</i>	Alkalmazott-kémiai Kolorisztikai Kutató Laboratórium, Budapest 62, Postafiók 182, Hungary.
<i>Makromol. Chem.</i>	<i>Die Makromolekulare Chemie</i>	Dr. Alfred Hüthig, Verlag GmbH, Wilckenstr 3, Heidelberg, Germany.
<i>Melliand Textilber.</i>	<i>Melliand Textilberichte International</i>	Melliand Textilberichte KG, 69 Heidelberg 1, Rohrbacher Str. 76, Germany.
<i>Mh. Chem.</i>	<i>Monatshefte für Chemie</i>	Springer-Verlag, A-1010 Wien, Mölkerbastei 5, Austria.
<i>Mund. Text. Arg.</i>	<i>Mundo Textil Argentino</i>	Esmeralda 853 8° P. of 111, Buenos Aires, Argentina.
<i>Nature</i>	<i>Nature</i>	Macmillan & Co. Ltd, St. Martin's Street, London W.C.2.
<i>Paint Manuf.</i>	<i>Paint Manufacture</i>	28 Essex Street, Strand, London W.C.2.
<i>Paint, Oil &amp; Col. J.</i>	<i>Paint, Oil and Colour Journal</i>	Morris Ashby Ltd, 10 Philpot Lane, London E.C.3.
<i>Paint Tech.</i>	<i>Paint Technology</i>	Sawell Publications Ltd, 4 Ludgate Circus, London E.C.4.
<i>Pakistan J. Sci. Ind. Res.</i>	<i>Pakistan Journal of Scientific and Industrial Research</i>	39 Garden Road, Karachi 3, Pakistan.
<i>Plastics &amp; Polymers</i>	<i>Journal of the Plastics Institute</i>	11 Hobart Place, London SW1W 0HL.
<i>Polymer Engng Sci.</i>	<i>Polymer Engineering and Science</i>	Society of Plastics Engineers Inc., 656 W. Putnam Avenue, Greenwich, Conn. 06830, U.S.A.
<i>Printing Tech.</i>	<i>Printing Technology</i>	Institute of Printing, 10/11 Bedford Row, London W.C.1.
<i>Proc. Chem. Soc.</i>	<i>Proceedings of the Chemical Society</i>	Burlington House, London W1V 0BN.
<i>Proc. Roy. Soc.</i>	<i>Proceedings of the Royal Society</i>	Burlington House, London W1V 0BN.
<i>Rept Govt Chem. Ind. Res. Inst., Tokyo</i>	<i>Reports of the Government Chemical Industrial Research Institute, Tokyo</i>	1-5 Honmachi 1-Chome, Shibuyaku, Tokyo 151, Japan.
<i>Rev. Roumaine Chim.</i>	<i>Revue Roumaine de Chimie</i>	23 Str. Dumbrava Rosie, Bucharest 9, Roumania.
<i>Sen-i Gakkaishi</i>	<i>Sen-i Gakkaishi</i>	c/o Tokyo Institute of Technology, Ookayama, Meguro-ku, Tokyo, Japan.
<i>Stain Tech.</i>	<i>Stain Technology</i>	Williams & Wilkins Co., Baltimore 2, Maryland, U.S.A.
<i>Svensk Papperstidning</i>	<i>Svensk Papperstidning</i>	Villagatan 1, 11432 Stockholm, Sweden.
<i>Talanta</i>	<i>Talanta</i>	Pergamon Press, Headington Hill Hall, Oxford.
<i>Tappi</i>	<i>Tappi</i>	Technical Association of Pulp and Paper Industry, 360 Lexington Avenue, New York, N.Y. 10017, U.S.A.
<i>Teintex</i>	<i>Teintex</i>	60 rue de Richelieu, Paris (2e), France.
<i>Teinture et Apprêts</i>	<i>Teinture et Apprêts</i>	Société d'Éditions Techniques de la Manutention Textile, 12 Rue d'Anjou, Paris (8e), France.
<i>Tekhnol. tekstil. Prom.</i>	<i>Izvestiya vysshikh uchebnykh zavedenii, Tekhnologiya tekstil'noy promyshlennosti (Technology of the Textile Industry of the U.S.S.R.)</i>	Ivanova, ulitsa Fridrikha Engel'sa 21, U.S.S.R.
<i>Tekstil. prom.</i>	<i>Tekstil'naya promyshlennost' (Textile Industry of the U.S.S.R.)</i>	Gizleprom, Moscow, Tsentr, ulitsa Kirova 39, 6-i etazh Komnata 620, U.S.S.R.
<i>Tex</i>	<i>De Tex</i>	Postbus 4, Doetinchem, Holland.
<i>Textil Praxis</i>	<i>Textil Praxis</i>	Konradin-Verlag Robert Kohlhammer GmbH, 7 Stuttgart 1, Postfach 625, Germany.
<i>Text. Chem. Colorist</i>	<i>Textile Chemist and Colorist</i>	American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, North Carolina, 27709, U.S.A.
<i>Text. Inst. &amp; Ind.</i>	<i>Textile Institute and Industry</i>	10 Blackfriars Street, Manchester M3 5DR.
<i>Text. Manuf.</i>	<i>Textile Manufacturer</i>	Editor, 100 Hulton Lane, Deane, Bolton Lancs.
<i>Text. Month</i>	<i>Textile Month</i>	Textile Business Press Ltd, Statham House, Talbot Road, Stretford, Manchester M32 0EP.
<i>Text. Prog.</i>	<i>Textile Progress</i>	The Textile Institute, 10 Blackfriars Street, Manchester M3 5DR.
<i>Text. Research J.</i>	<i>Textile Research Journal</i>	Publications Dept., P.O. Box 625, Princeton, New Jersey 08540, U.S.A.
<i>Textilveredlung</i>	<i>Textilveredlung</i>	Der Verlag, Postfach 207, CH-4001 Basle, Switzerland.
<i>Textile J. of Australia</i>	<i>Textile Journal of Australia</i>	142 Clarence Street, Sydney, N.S.W., Australia.
<i>Tintoria</i>	<i>Tintoria</i>	via Moscova 33, Milan 20121, Italy.
<i>Trans. Faraday Soc.</i>	<i>Transactions of the Faraday Society</i>	Aberdeen University Press Ltd, 6 Upper Kirkgate, Aberdeen, Scotland.
<i>Trans. Inst. Metal Fin.</i>	<i>Transactions of the Institute of Metal Finishing</i>	178 Goswell Road, London E.C.1.
<i>Ukrain. khim. Zhur.</i>	<i>Ukrainskii khimicheskii zhurnal (Ukrainian Chemical Journal)</i>	Kiev, 30 ulitsa Leontovicha 9a, U.S.S.R.
<i>Vysokomol. Soed.</i>	<i>Vysokomolekulyarnye Soedineniya</i>	Academy of Sciences of the U.S.S.R., Moscow, Kuznetskii Most, d. 9/10, U.S.S.R.
<i>Wool &amp; Woollens of India</i>	<i>Wool and Woollens of India</i>	Colour Publications Pte Ltd, 126A Dhuruwadi, off Dr Nariman Road, Bombay 25 DD, India.
<i>Wool Sci. Rev.</i>	<i>Wool Science Review</i>	International Wool Secretariat, Wool House, Carlton Gardens, London SW1Y 5AE.
<i>World Text. Abs.</i>	<i>World Textile Abstracts</i>	The Shirley Institute, Manchester M20 8RX.
<i>Zhur. obshch. Khim.</i>	<i>Zhurnal obshchei Khimii (Journal of General Chemistry of the U.S.S.R.)</i>	Academy of Sciences of the U.S.S.R., Leningrad B-164, Mendelevskaya liniya, U.S.S.R.
<i>Zhur. priklad. khim.</i>	<i>Zhurnal prikladnoi Khimii (Journal of Applied Chemistry of the U.S.S.R.)</i>	Academy of Sciences of the U.S.S.R., Leningrad B-164, Mendelevskaya liniya, U.S.S.R.

# ABBREVIATIONS AND SYMBOLS

## used in *The Journal of the Society of Dyers and Colourists*

No distinction is made in abbreviations between singular and plural

In special cases abbreviations and symbols other than those in the list may be used, but as far as possible they will be given either as in standard English dictionaries or in *British Standard* 1991: Part 1:1967

absolute .. .. .	abs.	equivalent .. .. .	equiv.	<i>para-</i> .. .. .	<i>p-</i>
acetyl .. .. .	Ac	ethyl .. .. .	Et	parts per million .. .. .	p.p.m.
alkyl radical (in chemical formula) .. .. .	Alk	Fahrenheit .. .. .	F	Patent .. .. .	P
alternating current .. .. .	a.c.	foot .. .. .	ft	phenyl .. .. .	Ph
ampère .. .. .	A	freezing point .. .. .	f.p.	poise .. .. .	P
Angström unit .. .. .	Å			potential difference .. .. .	p.d.
anhydrous .. .. .	anhyd.			pound .. .. .	lb
approximate, -ly .. .. .	approx., ca	gallon (Imperial) .. .. .	gal	precipitate .. .. .	ppt.
aqueous .. .. .	aq.	gallon (U.S.A.) .. .. .	gal (U.S.A.)	precipitated .. .. .	pptd
aryl radical (in chemical formula) .. .. .	Ar	gram .. .. .	g	precipitation .. .. .	pptn
asymmetric (applied to organic compounds) .. .. .	as-	gram-molecule .. .. .	mole	proportional to .. .. .	∝
atmosphere (pressure unit) .. .. .	atm.	greater than .. .. .	>	propyl (normal) .. .. .	Pr <sup>n</sup>
atomic .. .. .	at.			propyl (iso) .. .. .	Pr <sup>i</sup>
atomic weight .. .. .	at. wt	halogen (in chemical formula) .. .. .	Hal	qualitative(ly) .. .. .	qual.
		horse power .. .. .	h.p.	quantitative(ly) .. .. .	quant.
		hour .. .. .	h		
Baumé .. .. .	Bé	hydrogen ion concentration (negative logarithm) .. .. .	pH	racemic (organic chemistry) .. .. .	<i>r-</i>
benzoyl .. .. .	Bz			recrystallised .. .. .	recryst.
boiling point .. .. .	b.p.	inch .. .. .	in	refractive index .. .. .	<i>n</i>
British Patent .. .. .	BP	infrared .. .. .	i.r.	relative humidity .. .. .	r.h.
British thermal unit .. .. .	B.t.u.	inorganic .. .. .	inorg.	revolutions per minute .. .. .	rev/min
butyl (normal) .. .. .	Bu <sup>n</sup>	insoluble .. .. .	insol.	röntgen .. .. .	r
butyl (iso) .. .. .	Bu <sup>i</sup>				
butyl (tertiary) .. .. .	Bu <sup>t</sup>	kilocalorie .. .. .	kcal	saturate(d) .. .. .	sat.*
		kilogram .. .. .	kg	second .. .. .	s
calculated .. .. .	calc.	laevorotatory .. .. .	<i>laevo</i> , (-)-	secondary (organic compound) .. .. .	s-
calorie .. .. .	cal	less than .. .. .	<	soluble .. .. .	sol.
Celsius (centigrade) .. .. .	C	litre .. .. .	l	solution .. .. .	soln
centi .. .. .	c	logarithm (decadic) .. .. .	log	specific .. .. .	sp.
compound .. .. .	cpd	logarithm (natural) .. .. .	ln	specific gravity .. .. .	sp. gr.
concentrated .. .. .	conc.	lumen .. .. .	lm	square in (etc.) .. .. .	in <sup>2</sup> (etc.)
concentration .. .. .	concn			stokes .. .. .	S
configuration (carbohydrates and amino acids) .. .. .	D-, L-	maximum .. .. .	max.	substituted .. .. .	subst.*
constant .. .. .	const.	melting point .. .. .	m.p.	substitution on nitrogen, oxygen, etc. .. .. .	N-, O-, etc.
containing more than <i>n</i> carbon atoms .. .. .	containing > <i>n</i> C	<i>meta-</i> .. .. .	<i>m-</i>	symmetrical (organic compound) .. .. .	s-
corrected .. .. .	corr.	methyl .. .. .	Me		
crystal, -line, -lised (adjective) .. .. .	cryst.	metre .. .. .	m	temperature .. .. .	temp.
cubic centimetre (etc.) .. .. .	cm <sup>3</sup> (etc.)	microgram .. .. .	µg	tertiary (organic compound) .. .. .	t-
curie .. .. .	Ci	micron (micrometre) .. .. .	µm	turns per inch .. .. .	turns/in
cycle .. .. .	c	milli- .. .. .	m	Twaddell .. .. .	Tw
		millilitre .. .. .	ml		
decomposition .. .. .	decomp.	minimum .. .. .	min.	United States Patent .. .. .	USP
degree .. .. .	deg	minute .. .. .	min	ultraviolet .. .. .	u.v.
degree of polymerisation .. .. .	DP	molar (concentration) .. .. .	M	unsaturated .. .. .	unsat.*
degree of substitution .. .. .	DS	molecular, molecule .. .. .	mol.	unsubstituted .. .. .	unsubst.*
density .. .. .	ρ	molecular weight .. .. .	mol. wt		
derivative .. .. .	deriv.	nanometre .. .. .	nm	viscosity .. .. .	η
dextrorotatory .. .. .	<i>dextro</i> , (+) -	normal (concentration) .. .. .	N	volt .. .. .	V
dilute .. .. .	dil.	normal (organic compound) .. .. .	n-	volume .. .. .	vol.
direct current .. .. .	d.c.	not greater than .. .. .	≥		
distil, -led .. .. .	dist.	not less than .. .. .	≤	watt .. .. .	W
				wavelength .. .. .	λ
electromotive force .. .. .	e.m.f.	organic .. .. .	org.	weight .. .. .	wt
equation .. .. .	eqn	<i>ortho-</i> .. .. .	<i>o-</i>		
equimolecular .. .. .	equimol.	ounce .. .. .	oz	yard .. .. .	yd

\*Only in describing general formulae in the Abstracts Section